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The 64th Annual Report and Farm Facts

This record of significant agricultural developments in Kansas during 1980 is respectfully submitted to the governor and the legislature of the state. A record of Kansas agriculture maintained in reports issued by the Board continuously since 1877 is brought to date with this publication covering the calendar year of 1980.

W W

M E Johnson

W. W. Duitsman
Kansas Secretary of Agriculture

M. E. Johnson
State Statistician

The Cover . . .

This Kansas Meadowlark by Margaret Whittemore, a Topeka artist, first graced the cover of a Board of Agriculture publication in the 1954 "Birds of Kansas," now out of print. As the book reports, "Happy indeed was the choice by Kansas school children of the western meadowlark as the state bird of Kansas. Children, under the direction of Miss Madelaine Aaron, then secretary of the Kansas Audubon Society, voted on January 29, 1925, in the selection of a state bird for Kansas. Over 121,000 votes were cast, of which 48,395 were in favor of the western meadowlark. Two other favorites reaching second and third place were the bobwhite and the cardinal."

Thanks for photographs appearing in this volume should be given to Lee Rolfs, Kansas State Board of Agriculture; Kansas State University; the Kansas 4-H; Kansas Livestock Association; Kansas Pork Producers Council; Kansas Farm Bureau; Kansas State Fair; and other Kansas agricultural organizations.

Kansas State Board of Agriculture

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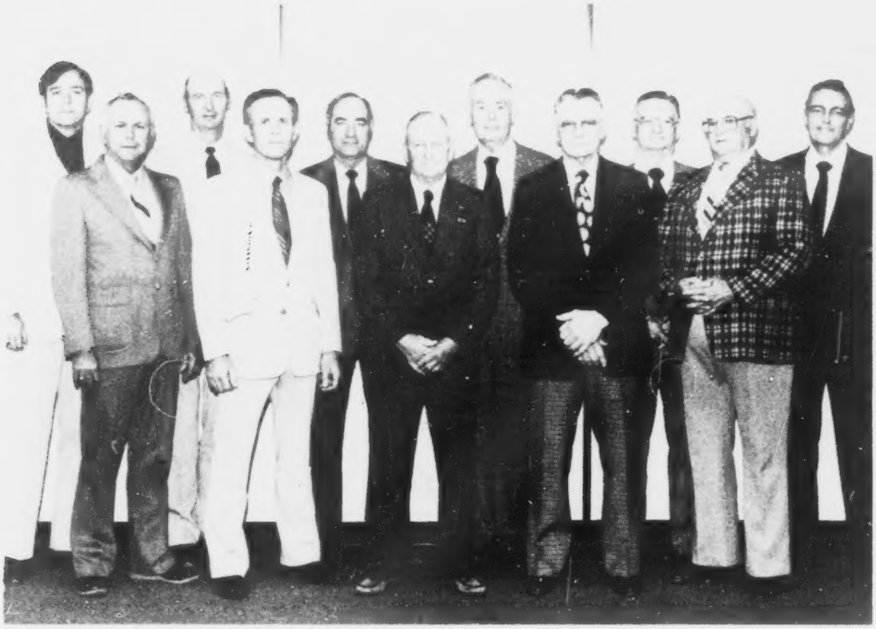

The Kansas Board of Agriculture pictured at spring quarterly meeting in Topeka are (left to right, top row) Don Jacka, assistant secretary, Topeka; Richard Reinhardt, Erie; F. E. Bliss, treasurer, Longton; Howard Wilson, president, Sharon Springs; Duane Steeples, Zurich; Bill Duitsman, secretary, Topeka; (left to right, front row) Altis Ferree, Yates Center; Jack Beauchamp, Ottawa; Robert Teagarden, vice president, La Cygne; David Schurle, Manhattan; and Floyd Coen, Elkhart. Not pictured are Gaylord Munson, Junction City; Charles Hamon, Valley Falls; and John Oswald, Hutchinson.

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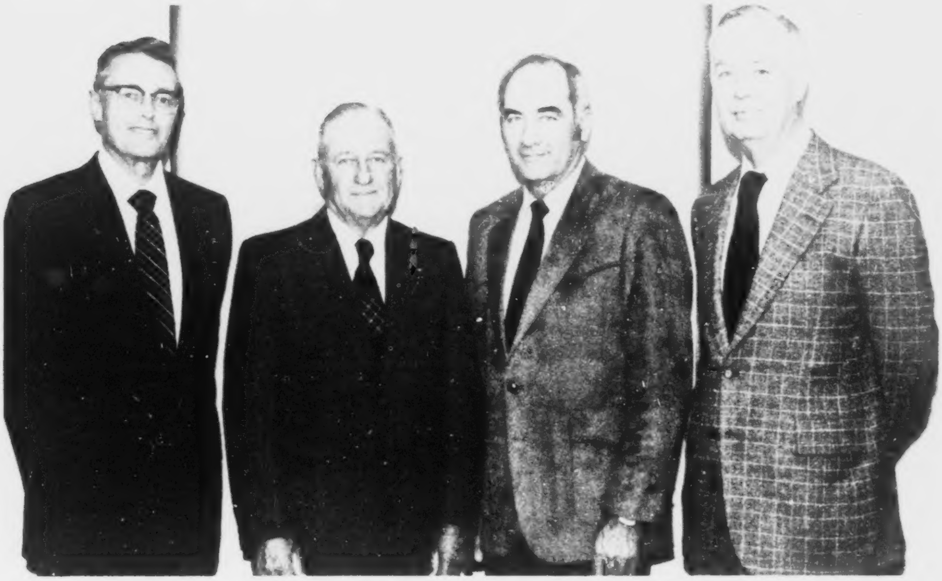
The offices of the Kansas State Board of Agriculture are located at 901 Kansas Avenue, Topeka, Kan. 66612. The statistical division is at 444 S.E. Quincy, Topeka, Kan. 66683.



Officers of the Kansas Board of Agriculture are (left to right) Secretary Bill Duitsman; Robert Teagarden, vice president; F. E. Bliss, treasurer; and Howard Wilson, president.

87th President Howard Wilson Is 1981 Leader

Howard C. Wilson, an attorney and rancher from Sharon Springs, was elected 1981-82 president of the Kansas State Board of Agriculture. Board members and officers were elected at the Board's 110th Annual Meeting in Topeka.

Wilson, the 87th president, has been a member of the Board of Agriculture for more than 20 years. A native of Hutchinson, he moved to California with his family as a youth. He graduated from the University of California at Los Angeles with a bachelor of arts degree.

Wilson's first year of legal training was at Harvard University. He then transferred to Stanford Law School which awarded him the L.L.B. degree. Wilson practiced law in California for five years before returning in 1947 to the Wallace County ranch which had been acquired by his father and grandfather in 1914.

For the last 33 years, Wilson has combined the practice of law with farming. He raises wheat and milo, feeds and pastures stocker cattle, and has a small feedlot.

Wilson is a member of the Wallace County Farm Bureau and Wallace County Co-op. He has been an officer of Grange and Farm Bureau. He has been active in the Kansas Livestock Association, serving as a director and chairman of the resolutions committee. For six years he was a member of the Wallace County Extension Council; he also is a past member of the state executive committee of the Agricultural Hall of Fame.

Wilson and his wife, Dorothy, are the parents of three grown children, and have eight grandchildren.

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AGRICULTURAL HIGHLIGHTS

W. W. Duitsman, Secretary of Agriculture
M. E. Johnson, State Statistician

Kansas agriculture began the '80s with 75,000 farms. Although this was less than half the number in the state 40 years earlier, Kansas farms have shown a tremendous increase in productivity over the years. The value of livestock on Kansas farms increased nearly twenty-fold from $146 million in 1940 to $2.9 billion in 1980. The value of crop production in 1980 amounted to $3.08 billion despite widespread drought, still nearly 18 times the value of crops produced in 1940.

As farms increase in efficiency, fewer and fewer people directly are involved in farming. Consumers reap great benefits as they get more and more for their food dollars. Recent figures show the average American spends only 16 percent of his or her take-home pay for food. An hour's work in this country will buy nearly four pounds of beef.

Agriculture is important, particularly in the international marketplace. Kansas ranks fifth among the states in the export of agricultural commodities. In recent years these exports have accounted for 35 to 40 percent of Kansas' cash receipts from farming. The dollar value of the state's agricultural exports reached a record high of $2.2 billion in fiscal year 1980. Wheat led the way with $1.2 billion in export sales; feed grains ranked second in importance with sales of $521 million. Soybean sales totaled $155 million.

Market development efforts for agricultural products have been an important factor in increasing export sales. The success of these efforts to promote the sale of wheat, feed grains and soybeans in a limited number of countries suggests that expansion of export promotion into additional countries and into meat and meat products likely would provide a high return.

Weather Detrimental

The weather in Kansas during 1980 put a critical economic burden on many farmers. Widespread drought and extreme temperatures resulted in a significant reduction in crop and livestock production. The early months of the year provided sufficient rainfall for a record wheat crop of excellent quality, but hot, dry weather set in about mid-June. The weather was ideal for wheat harvest. All areas except the northwest suffered progressively drier conditions throughout the summer and much of the fall. The eastern two-thirds of the state generally averaged less than 80 percent of normal precipitation for the year; the southwest showed only 61 percent of normal. Many individual locations were much drier, particularly during critical growth periods. In combination with the dry weather were high temperatures. They began with record-breaking temperatures of over 100 degrees the last half of June. Wichita recorded 46 days with temperatures of 100 degrees or over; Dodge City recorded 17 consecutive days of 100 plus degrees to break a 15-day record established in 1934. Many Kansas counties were left with severe shortages both of subsoil and topsoil moisture. Farm ponds often were so low that water for livestock had to be hauled.

Wheat

The 1980 Kansas wheat crop reached a record of 420 million bushels, surpassing the previous year's record of 410 million bushels by two percent. The 1980 crop was seeded on 13 million acres, up seven percent from the previous year; 12 million acres were harvested. The yield per acre, at 35 bushels, was three bushels below the record yield of 1979. Although the 1980 crop was seeded under generally dry conditions, losses from wind and winterkill were minimal. Hail and thunderstorms caused some lodging and reduced local yields in the northern and western areas. Generally, however, harvest reached completion ahead of schedule with few problems. The quality of the crop was excellent with test weights averaging 61.2 pounds per bushel, protein at 12.3 percent and moisture at 10.5 percent, the lowest on record.

Wheat sown in the fall of 1980 for harvest in 1981 totaled 14 million acres, an eight percent increase over the previous year and the highest acreage since 1953. Early seeded fields got off to a fast start in September; however, available surface moisture rapidly was depleted and subsequent growth and development were inhibited. Late seeded fields were planted under very short moisture conditions. Although there was more wheat pasture available in 1980 than in the previous year, wheat pastures generally were limited.

Other Crops

Sorghum grain ranked second only to wheat among Kansas grain crops. Kansas' 1980 production totaled 156.5 million bushels, 36 percent below the record harvest of 1979. Drought-reduced sorghum grain yields averaged only 43 bushels per acre, 26 bushels less than in 1979 and the lowest since 1975. Some 300,000 acres of sorghums were abandoned in 1980 as a result of drought and insect damage. Yields on most remaining acreages were significantly reduced.

Although the acreage of corn harvested in 1980 was nearly equal to the previous year, dry weather reduced yields and caused a significant increase in acreage cut for silage. The crop yielded only 94 bushels per acre in 1980, resulting in a total crop of 116.6 million bushels, down 32 percent from the previous year and the smallest production in Kansas since 1970. Some 426,000 acres of corn were harvested for silage—silage yields averaged only nine tons per acre compared with 16 tons in 1979.

In 1980, for the second year in a row, Kansas farmers harvested more acres of soybeans than of corn. Although soybean production, at nearly 24 million bushels, was down 42 percent, yields averaged 16.5 bushels per acre. This was 10 bushels less than the previous year but slightly above the 15 bushel per acre yield obtained in 1976. With the expansion of the state's soybean acreage, more soybeans are being produced in north central and western Kansas.

Preliminary crop value estimates place the price per bushel of most crops above year-ago levels. The value of Kansas crop production in 1980 has been estimated at $3.08 billion, one percent above 1979 and the highest on record. The value of the wheat crop, at $1.62 billion, was up six percent, nearly double the value of the 1978 crop. The value of grain sorghum, at $460 million, was down 15 percent from 1979. The value of corn production, at $396 million, was eight percent below 1979. The value of soybeans produced in Kansas, at $182 million, was 26 percent below the previous year. Although the average price of hay was up sharply as a result of a 28 percent cut in hay production caused by drought, there was a ten percent decline in the total value of hay produced.

Livestock

Kansas livestock producers suffered severe economic losses during the year. The losses stemmed from inflation, drought, a decline in consumers' real incomes and relatively high meat production. Total red meat and poultry consumption was at a record high 212 pounds per capita retail-weight-basis in 1980. Per capita beef supplies decreased by 1.5 pounds, pork increased by four pounds and poultry nearly one-half pound. Kansas slaughter plants produced about 2.3 billion pounds of red meat during 1980, an increase of six percent over the previous year.

Cattle

The January 1, 1981 inventory of cattle and calves in Kansas totaled 6,450,000 head, a four percent increase over the previous year. Beef cow numbers increased to 1.9 million head, up eleven percent. Heifers for beef cow replacement increased six percent, suggesting that the cattle inventory in Kansas will continue to grow at a relatively rapid pace. The numbers of cattle on feed in Kansas during the year generally were well below the previous year's totals. As of January 1, 1981, Kansas had 1.1 million head on feed, 13 percent below the level of the previous year. The winter of 1980-81 provided quite favorable weather for feeding cattle and offered faster gains at lower rates of feed consumption than usual.

Inflation, however, combined with drought-induced higher grain costs, pushed up the cost of production. At the same time, relatively high levels of red meat and poultry production, along with a decline in consumers' real incomes, reduced the prices received by farmers. Cattle feeders saw only one month of positive net margins during 1980 The early months of 1981 produced negative margins ranging around $10 per hundredweight. Losses in this range also had an effect on prices received by cow-calf operators. This, together with high interest rates and recent drought, has created serious financial problems for many cattle producers.

Hogs

The number of hogs on Kansas farms on December 1, 1980 totaled 1.9 million head. This was nine percent below the previous year; the number kept for breeding was four percent below the previous year. In September, hog producers in Kansas and other major states had indicated they were cutting back on production more severely; however, the prices received for hogs showed a significant improvement during the fall. It appeared a number of producers reversed their plans and increased production. The prices received for hogs began falling in November and hog producers saw negative net margins at the end of the year and into the early months of 1981. Many producers were losing as much as $10 per hundredweight. Weather had a very significant impact on pork production during the summer of 1980 and winter of 1980-81. Summer heat reduced the rate of gains and also had an adverse effect on conception rates. The mild winter significantly improved the rate of gain, resulting in some bunching of marketings that had not been fully anticipated by market observers. The inventory value of hogs and pigs on Kansas farms December 1, 1980 reached $123.5 million. This was nearly 16 percent higher than the previous year.

Other Livestock

The number of sheep on Kansas farms and ranches numbered 200,000 January 1, 1981, 15 percent below the 1980 level and the first decline after four years of expanding flocks. Sheep and lambs on feed for slaughter market numbered 60,000 head, down 25 percent from the previous year. The lamb crop during 1980 totaled 145,000 head, with the lambs saved per 100 ewes averaging 116, the highest lambing rate of recent years and well above the national average of 97 lambs per 100 ewes. The January 1, 1981 Kansas sheep inventory was valued at $12.5 million.

Kansas milk production during 1980 totaled 1.36 billion pounds, two percent more than the previous year but one percent below 1978. Output per cow in 1980 reached a record 11,016 pounds, a 203 pound increase over the previous year. The annual average number of cows milked was 123,000 head in 1980. There were 6,200 Kansas farms with milk cows. Nearly 73 percent of those had less than 30 head. About 15 percent of the operations had more than 50 head and held some 58 percent of all milk cows in the state. There were an estimated 2,140,000 chickens on Kansas farms on December 1, 13 percent below the previous year. Laying flocks included 1,730,000 hens and pullets, down nine percent.

Prices

Average prices received for crops in 1980 generally were above previous year levels. Corn was 89 cents above a year earlier, grain sorghum $1.32 per hundredweight over the previous year, soybeans were $1.63 a bushel higher and wheat was 13 cents higher than the previous year. Cattle prices were down sharply. Steer and heifer prices were $2.80 per hundredweight below the previous year and the weighted price of all beef cattle was off $4.80 per hundredweight. Sheep and lamb prices also were down sharply from year earlier levels but hogs were about $5 a hundredweight below the previous year. The index of prices received by Kansas farmers for all farm products fell slightly during the year. At the same time the index of prices paid by farmers was up 13 percent. The parity ratio during the year ranged from a low of 60 in April to a high of 67. It closed the year at 67.

Cash Receipts and Farm Income

Preliminary estimates of cash receipts from Kansas farm marketings during 1980 totaled $5.94 billion, an increase of less than one percent. In 1979, Kansas farmers had net farm income exceeding one billion dollars for the first time since 1973. With continued increases in farm production expenses and some decline in government payments it would appear that the final figures for Kansas' 1980 net farm income would be little more than half of the billion dollar level achieved in 1979.

Outlook for 1981

Despite increases in grain prices, sharp reductions in the yield of fall-harvested crops resulted in an increase of less than one percent in Kansas' value of crop production in 1980. Early months of 1981 saw widespread shortages of top and subsoil moisture in Kansas and limited the 1981 crop outlook. Cash receipts from crops during 1981 will be highly dependent on weather and world crop outlook, along with world economic and political conditions. The livestock industry had a poor year in 1980, with hog prices averaging 12 percent below 1979 and beef cattle prices averaging seven percent lower. Continued inflation plagues the industry by pushing up production costs and eroding consumers' buying power.

The longer term outlook for Kansas agriculture is much more optimistic. Farmers are increasingly adopting cultural practices which consume less energy and less water in efforts to control production costs. Many are developing increasingly sophisticated marketing plans and making some use of futures markets and forward contracting in order to establish selling prices. In Kansas, nearly 40 percent of cash receipts stem from export sales. There is widespread speculation that world grain shortages substantially will push up grain prices and U.S. grain exports will show further increases. This would have a very positive effect on Kansas agricultural income. It also seems likely, however, that Kansans will continue to see some years of surplus production which could be devastating to farmers who, with inflation and high interest rates, are operating at higher risks with increasing amounts of capital.

KANSAS FERTILIZER LAW
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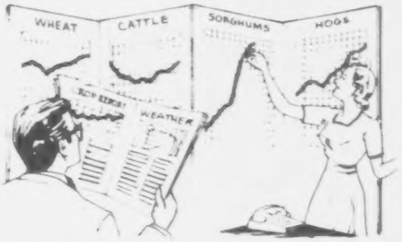
NEW BRAND SOIL ADDITIVE
BIGGER GROW
ADDITIV

CONTROL

ENTOMOLOGY

MARKETING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STATISTICAL

DIVISION REPORTS

PROCESSING BEEF • POULTRY
QUALITY MEATS

MEAT & POULTRY

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DAIRY

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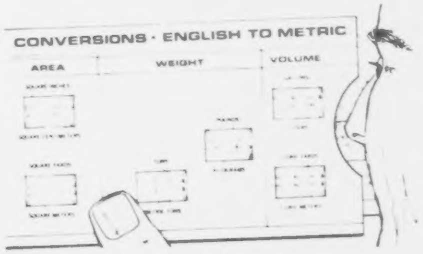
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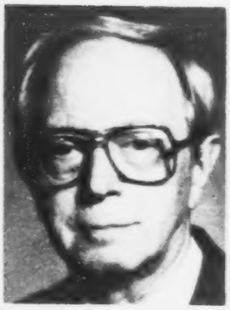


R. H. GUNTERT
DIRECTOR

KANSAS
FERTILIZER
LAW
BIGGE
GROW
NEW

CONTROL DIVISION

High prices and short supplies of fertilizers can make the variety of substitute products and soil additives offered to Kansas farmers seem very tempting. Research and commonly known facts about soils, however, solidly disprove claims that use of certain products can enhance the activity of soil microorganisms or add new and beneficial microorganisms to the soil.

Microorganisms Aid Soil

What are soil microorganisms and how important are they? Most soils support a vast population of tiny organisms that can be seen only with the aid of a microscope. Billions of these tiny microorganisms which concentrate near the soil surface are bacteria, fungi, protozoa, nematodes and algae. By tilling the soil, the farmer helps sustain these microorganisms as he or she sustains the crops above the ground. Microorganisms obtain their food by breaking down complex organic substances manufactured by higher plants. This interaction between microorganisms and plants has been occurring naturally in most soils for thousands of years. Without it, man could not survive since the resulting dead plants and animals would soon choke the earth's surface.

Soil Returns to Normal

The application of such widely-used materials as herbicides and fertilizers on the land rarely change the number of soil organisms for long. Once a herbicide or a fertilizer has dissolved, the population of microorganisms will return to normal in a short period of time.

Farmers should approach the use of soil additives with caution. If a farmer is considering the use of these products instead of a fertility program, it should be on a small scale—perhaps one or two acres the first year to determine exactly what the effects on the soil will be. When soil additives have been used to replace fertility programs, yields have dropped significantly.

Soil Additives Questioned

There is no real way to estimate precisely what is being spent on soil additives in Kansas, but sales have been substantial. Some of the materials being offered for sale are definitely of questionable value and will not do for the soil what is claimed for them. In some cases, there is no data available because the products have not been tested, but neither is there any data to refute the claims that they will not do what the seller says they will do.

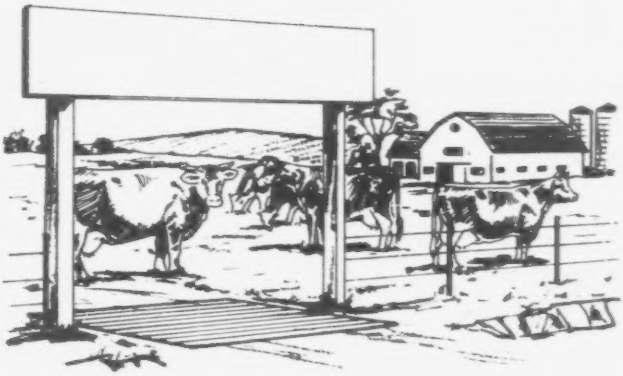
Few of these products have a guaranteed analysis of plant nutrient content. Sales are made by many of the companies from testimonials and photographs and very little, if any, scientific research.

Approach With Care

It is suggested that Kansas farmers use discretion in the purchase of such products. Farmers should be on the alert for fraudulent soil additives. They should have the soil tested before buying. Read labels on all products, look for the use instructions and guarantees. Check into the cost-benefit ratio to be sure the investment will pay off. Research has proven that a pound of nitrogen is pretty much a pound of nitrogen regardless of the source, so it is wise to select and use the one that is the cheapest per pound of plant nutrients.

The control division administers the Kansas Fertilizer Law. This involves registration of blenders and of grades offered for sale, sampling of fertilizer products, chemical analysis of samples and handling of violations. The division also compiles tonnage data on sales of fertilizer in Kansas. These data are released semiannually. In addition to the Kansas Fertilizer Law, the division administers laws requiring honest labeling of commercial feeds, agricultural seeds, agricultural chemicals and livestock remedies.

Bob Guntert, director of the control division of the Kansas State Board of Agriculture, receives congratulations from Secretary W. W. Duitsman for his 33 years of service with the state of Kansas.



DAIRY DIVISION

BRACE ROWLEY
DAIRY COMMISSIONER

The adoption of the United States Public Health Service Food and Drug Administration Grade A Pasturized Milk Ordinance in 1980 revised Kansas Grade A milk regulations.

This model milk code is used universally by all states in the administration and regulatory enforcement of requirements for the production and processing of Grade A milk and milk products. It also is the basic standard used to certify milk sheds and processing plants which participate in the National Conference of Interstate Milk Shippers program which provides for free movement of Grade A milk in interstate commerce.

Kansas exports both Grade A raw and Grade A pasteurized milk and milk products, making it vitally important to the Kansas dairy industry that state regulations comply with requirements in the national milk code.

The annual Kansas Grade A milk production exceeds one billion pounds. Only 575 to 595 million pounds of the state's Grade A milk supply is used by Kansas processors to produce Grade A pasteurized milk and milk products. Out-of-state markets must be found for a portion of those pasteurized products.

Cooperative milk marketing associations in Kansas export a large portion of the surplus to out-of-state Grade A milk processors. The volume which cannot be sold for the production of pasteurized milk products is diverted to be used in the production of manufacturing milk products.

The requirements of the revised Grade A milk regulations basically are the same as the previous regulations. Amendments and additions which were made recognize improvements made in equipment, method and procedures utilized by the industry since 1965. Included among the changes are the following.

Changes Listed

Regulations now permit cleaning, sanitizing and storage of milking equipment in the milking area on dairy farms with clean-in-place systems. Ultrapasteurization can be used to extend the shelf life of dairy products; additional high temperature short-time holding periods have been authorized. The cooling temperature requirements for farm milk have been lowered from 50 to 45 degrees.

A more sensitive test for the detection of antibiotic residues has been incorporated into the regulations; testing for such residues has been extended to pasteurized milk products. The definitions and standards for pasteurized milk and milk products have been amended to make them identical with "standards of identity" recently established by the Food and Drug Administration for dairy products. Two new product standards have been added for a "low sodium" and a "lactose reduced" milk product which may be labeled Grade A.

The Kansas manufacturing milk regulations also were revised by adopting the U.S. Department of Agriculture's "Recommended Requirements for Milk for Manufacturing Purposes." This model code for manufacturing milk was developed to provide uniformity of manufacturing milk requirements by the Consumer and Marketing Service of the USDA in cooperation with state dairy regulatory agencies and the manufacturing milk industry.

This document, for adoption by the states as their manufacturing milk laws or regulations, gives the manufacturing milk industry a national code like the one which has been available to the Grade A milk industry. Requirements in the code are being utilized by the USDA Dairy Inspection and Grading Branch of the Consumer and Marketing Service in their USDA Approved Plant Program for cheese, butter and nonfat dry milk plants that want to USDA grade label their products. These requirements also are a prerequisite of manufacturing milk plants which offer butter, cheese and nonfat dry milk products to the Commodity Credit Corporation in the dairy price support program. Kansas butter, cheese and nonfat dry milk plants have been participating in the USDA Approved Plant Program for several years. That participation makes them eligible for USDA grading services.

The new manufacturing milk regulations require an annual inspection and certification of manufacturing milk farms. Certification of farms requires compliance with construction and repair of dairy farm milking barns; milkroom equipment; and facilities used in milking, handling and storage of milk. Previous state regulations established only milkroom equipment and facilities requirements. Milk quality standards for farm milk supplies, in addition to bacterial and sediment quality, now include standards for abnormal milk and require farm milk to be tested and rejected if antibiotic residues are detected.

The new regulations also establish compliance requirements for equipment and facilities utilized by manufacturing milk plants and criteria for the cleanliness and sanitary conditions of plants processing, packaging and storing manufactured milk products to ensure good manufacturing practices.

Board of Agriculture President Gaylord Munson congratulates Brace Rowley, director of the dairy division, as he receives an award for 34 years of state service. Pictured (left to right) are Secretary Duitsman, Rowley and Munson.

STOP
STATE
LAW

DEAN GARWOOD
DIRECTOR

ENTOMOLOGY DIVISION

Entomology Division

The entomology division is responsible for administration of laws dealing with detection and control of plant pests and diseases. Division functions include conducting the Kansas economic insect and plant disease survey program, supervising pest suppression or eradication programs, inspecting plant nurseries for dangerous or imported pests, and inspecting honeybee colonies for American Foulbrood or other serious and contagious bee diseases. The division also oversees those portions of the Kansas Pesticide Law dealing with ornamental, industrial, institutional, structural and public health pest control. Division services include the inspection and certification of grain, seed, walnut lumber and other plants and plant products for foreign export.

Pest Surveys

Division entomologists and plant pathologists maintain a field survey program for plant pests and diseases occurring in the state. This survey program originally was initiated to provide the basis for implementation of regulatory and quarantine provisions of the Kansas Plant Pest Act, a law administered by the division. The information gained by the survey program, however, has proven of ever-increasing value to other division programs and agricultural interests throughout the state.

Exports Aided

Sales of Kansas-grown grain and other farm products to foreign countries continue to expand rapidly. Purchases are made, however, only when foreign buyers are assured that products are free of damaging pests and diseases. The integration of plant pest survey data with division pre-shipment commodity inspection programs has given Kansas a high degree of integrity in the state's export certification programs, and has done much to alleviate the fears of many foreign countries about Kansas-grown products.

Information gained by the pest survey program also is used to forewarn farmers and other plant growers of potential pest problems and to determine proper timing of control measures. This information is distributed using various media available to the State Board of Agriculture and the Cooperative Extension Service.

Summary of Plant Disease Conditions in Kansas in 1980

Thomas Sim IV, Survey Plant Pathologist

Highlights

1980 was a year of contrasts for Kansas crop production. Plentiful spring rains, especially in the west, helped farmers establish a new wheat production record. The summer of 1980, however, was the hottest and driest recorded since the mid-'30s. All vegetation was stressed, with little rain over most of the state from late May until September. Irrigated areas had reduced moisture stress, but long periods of 100-degree temperatures still stressed crops. In general, the hot, dry weather reduced plant diseases.

A new wheat disease, strawbreaker, was detected in Lincoln County in May. The future severity of strawbreaker is still unknown.

Despite dry weather, sorghum downy mildew continued to spread. It was found for the first time in Shawnee County in early July. Limited surveys for the soybean cyst nematode in southeast Kansas during July detected no infestations. The pinewood nematode was found in Brown, Doniphan and Montgomery counties in late 1979 and early 1980, bringing the total known affected counties to five, including Cherokee and Crawford. It was again active in Cherokee and Crawford counties in September and October. More infected pines apparently die when moisture stresses occur.

Alfalfa

Losses from foliar and stem diseases are estimated at seven percent. As in 1979, the cool season diseases, such as spring black stem, caused by *Phoma medicaginis;* Lepto leaf spot; caused by *leptosphaerulina briosiana;* downy mildew, caused by *Peronospora trifoliorum*; and yellow leaf blotch, caused by *Leptotrochila medicaginia,* caused the most damage. Adequate spring rains allowed cool season diseases to cause defoliation on the first and second cuttings across Kansas.

Summer black stem, caused by *Cercospora medicaginis;* and bacterial leaf spot, caused by *Xanthomonas alfalfae,* were the most common alfalfa diseases during the summer. The hot, dry weather, however, kept these diseases from developing. The drought caused more damage than diseases. Rust, caused by *Uromyces striatus,* was observed in the fall but was much less damaging than in 1979.

Root and crown diseases were not often found in 1980, but a few diseased fields were found in widely scattered areas. Root and crown rots may increase in 1981 because of the 1980 drought and the fact that some growers were cutting alfalfa well into the fall. That removed much top growth needed to supply the roots with food reserves for winter survival and initial growth in the spring. Estimated statewide root and crown rot losses—a trace.

Total estimated disease loss is seven percent compared with 17.5 percent in 1979 and a four-year-average of 18.9 percent.

Corn

Corn was damaged more by adverse growing conditions than disease. High temperatures during tasselling resulted in poor pollination. Irrigated corn fared better than dryland, but still was affected by drought. Much southeast Kansas corn was cut for silage in July and August.

Common smut, caused by *Ustilago maydis,* was the most widespread corn disease, reported from all districts except the southeast. Common smut could be found in most fields with incidences of ear and stalk infections ranging from zero to 16 percent and zero to nine percent respectively. Stalk infections were highest in northwest and west central Kansas; ear infections highest in the southwest. Estimated loss—three percent.

Stalk rots were most damaging. The statewide incidence of charcoal rot, caused by *Macrophomina phaseolina*, was greater in 1980 than in 1979. Fusarium and Gibberella stalk rots, caused by *Fusarium* sp. and *Gibberella* sp., were less prevalent, according to the fall corn survey. Charcoal rot was severe, especially in the south central district where incidences above 50 percent were common. It was observed in all districts except the northwest and southwest. Estimated loss from charcoal rot—five percent. Fusarium and Gibberella stalk rots were most prevalent through the central third of the state, but infected fields were found statewide. Some lodging was reported from northeast and north central Kansas. Estimated loss from Fusarium and Gibberella stalk rots—four percent.

Maize dwarf mosaic was reported from all areas except the southeast crop reporting district. Only in north central Kansas, with incidences up to 65 percent in some fields, were incidences above a trace. High temperatures masked symptom expression; little maize dwarf mosaic was reported after Aug. 1. Maize dwarf mosaic is a component of corn lethal necrosis disease with the maize chlorotic mottle virus. It again was active in parts of Norton, Phillips, Smith, Osborne, Cloud and Republic counties. Incidences in infected fields ranged from a trace to 65 percent. Losses can be severe in fields with a high percentage of infected plants. Estimated loss from maize dwarf mosaic and corn lethal necrosis—2.5 percent.

Common rust, caused by *Puccinia sorghi*, was much less prevalent. It was observed in the southwest, south central, central and northeast reporting districts. Incidences seldom were above 10 percent. Southern rust, caused by *Puccinia polysora*, first recognized in Kansas in 1979, was reported from a few north central and northeast Kansas fields in late summer. Statewide losses from common and southern rusts in 1980 are negligible.

Leaf freckles (Goss's wilt), caused by *Corynebacterium nebraskense*, were reported from one Sherman County field in late July. That field had been hail-damaged earlier in the season. Statewide losses are negligible.

Total estimated loss—14.5 percent compared to 19.8 percent in 1979 and a four-year-average of 18.4 percent. Note the 1979 estimate contains a five percent loss attributed to nematodes.

Sorghum

Three bacterial sorghum diseases were most widespread. Bacterial stripe, caused by *Pseudomonas andropogoni;* bacterial streak, caused by *Xanthomonas holcicola;* and bacterial spot, caused by *Pseudomonas syringae*, were observed in all parts of the state except the southeast. Incidences were greatly reduced from 1979. Estimated loss—.5 percent.

Maize dwarf mosaic was less prevalent than in 1979 when it was reported from all nine districts. It was found only in the southwest, central, north central, northeast and east central districts in 1980. Incidences generally were less than five percent. The high summer temperatures may have masked symptom expression, making field diagnosis more difficult. Estimated loss—one percent.

The incidence of Fusarium stalk rot, caused by *Fusarium* sp., was greater than in 1979. It was reported most often in the south central, northwest, north central, northeast and southeast districts. Limited lodging was observed, even though incidences of the disease were greater than the previous year in areas where lodging was a problem. The hot, dry summer probably played a role in the increase of stalk rots. Estimated loss—3.5 percent.

The rapid 1978-1979 spread of downy mildew, caused by *Peronosclerospora sorghi*, nearly was halted in 1980; however, it was observed for the first time in Shawnee County in July, establishing a county record. Downy mildew also was observed affecting shattercane in corn and sorghum in the Kansas River Valley in August and September. Corn and sorghum were not affected. No losses from this disease occurred in 1980.

Other sorghum diseases in 1980 were head smut, caused by *Sphacelotheca reiliana*, observed in trace amounts in southwest Kansas; and sooty stripe, caused by *Ramulispora sorghi*, observed in trace amounts in a few counties in extreme northeast Kansas. Losses from these diseases are negligible statewide.

Total estimated disease loss is five percent compared with 11.5 percent in 1979 and a four-year-average of eight percent.

Soybean

Drought conditions in the major soybean growing areas dramatically reduced yields and made them more susceptible to damage from charcoal rot. This disease, caused by *Macrophomina phaseolina*, was most damaging to soybeans to 1980, found in nearly every soybean field surveyed in the eastern third of Kansas in September and October. Incidences of 50 to 100 percent were common. Other soilborne diseases in 1980 were Phytophthora root rot, caused by *Phytophthora megasperma* var. *sojae;* Rhizoctonia root rot, caused by *Rhizoctonia solani;* and pod and stem blight, caused by *Diaporthe phaseolorum* var. *sojae*. Phytophthora root rot was observed in scattered fields in east central, central, south central and southwest Kansas. Incidences generally were less than two percent, although it was severe in a few irrigated fields in central and southwest Kansas. Rhizoctonia root rot caused seedling blight in the east central district early in the season. The incidence of pod and stem blight was reduced greatly from levels of previous years. Estimated loss from soilborne diseases—12 percent.

Dry conditions reduced foliar disease activity in 1980. Bacterial pustule, caused by *Xanthomonas phaseoli* var. *sojensis*, the most common, was observed in southwest, south central, north central and northeast Kansas. Traces of bacterial blight, caused by *Pseudomonas glycines*, were reported from southwest and northeast Kansas. Other foliar diseases were brown spot, caused by *Septoria glycines;* and Alternaria leaf spot, caused by *Alternaria* sp. These were confined to a few fields in northeast and east central Kansas. Estimated foliar disease loss—.1 percent.

Limited surveys for the soybean cyst nematode *(Heterodera glycines)* were conducted during the summer; no field infestations were found. This nematode still is not known to exist in Kansas.

Total estimated loss is 10.1 percent compared with five percent in 1979 and a four-year-average of eight percent.

Wheat

Wheat diseases were lower than average, estimated at 10 percent compared with 10.6 percent in 1979 and a four-year-average of 15.1 percent.

This summary estimates both percent and bushel loss based on the Kansas Crop and Livestock Reporting Service Dec. 23 wheat yield estimate of 420 million bushels, a new wheat production record which surpasses the 1979 record by two percent.

The most damaging wheat disease in 1980, tan spot, caused by *Pyrenophora trichstoma*, caused an estimated loss of 3.5 percent (14,700,000 bushels). Cool, wet weather in late March was ideal for initial infection. This disease was statewide and most serious through the central third of the state, especially in reduced tillage fields. Secondary spread (probably by the imperfect stage Helminthosporium tritici-repentis) caused lesions on flag leaves during late April and May.

Soilborne mosaic caused an estimated loss of three percent (12,600,000 bushels). Usually the most damaging wheat disease in Kansas, it was surpassed this year by tan spot. Early symptoms were light as March temperatures rose above normal, but cool, wet conditions in April allowed maximum symptom development. This disease historically has been considered a problem only in central and eastern Kansas, but infected fields in irrigated areas of southwest Kansas have become more apparent in recent years.

The importance of planting soilborne mosaic-resistant varieties where the disease is a problem was demonstrated at variety plots in central and eastern Kansas in 1980. The following table compares yields of Newton, a resistant variety, and Vona, a susceptible variety, at six county variety plots where soilborne mosaic was severe. Yields from nearby Kansas State University experiment fields also are included.

	Yield, Bushels per acre	
Location	Newton	Vona
Jackson County (NE) variety plots	67	52
Powhattan Experiment Field, Brown Co. (NE)	70	67
Riley Co. (NE) variety plots	64	53
KSU Agronomy Farm, Riley Co. (NE)	58	59
Rice Co. (C) variety plots	51	32
Hays Experiment Station, Ellis Co. (C)	66	63
Sedgwick Co. (SC) variety plots	66	35
Sumner Co. (SC) variety plots	45	33
Hesston Experiment Field, Harvey Co. (SC)	53	61
Reno Co. (SC) variety plots	50	34
South Central Experiment Field, Reno Co. (SC)	39	40

Vona has excellent yield potential in the absence of soilborne mosaic, averaging one bushel per acre more than Newton at the 13 KSU experiment stations across the state. At the six county variety plots where the disease was severe, however, Newton yielded 42 percent more than Vona.

Cephalosporium stripe, caused by *Cephalosporium graminuem,* caused an estimated loss of 1.3 percent (5,460,000 bushels). The incidence was somewhat less than 1979 levels. This disease was most prevalent in the eastern half of the state, but is being found more often in northwest Kansas. As in previous years, the McPherson-Harvey-Sedgwick county area was affected most by Cephalosporium stripe.

Speckled leaf blotch, caused by *Septoria tritici,* caused an estimated loss of one percent (4,200,000 bushels). This foliar disease was statewide but most prevalent in the western third of the state where above-average rainfall in the spring encouraged disease development.

Take-all, caused by *Gauemannomyces graminis* var. *tritici,* reduced yields by an estimated .6 percent (2,520,000 bushels), a slight increase over the 1979 estimate. Although few severely infected fields were found, the disease was more widespread. It occurred most often in the southern and eastern halves of Kansas.

The incidence of wheat streak mosaic was reduced somewhat from the lower-than-average levels of 1979. In 1980, wheat streak mosaic caused an estimated loss of .3 percent (1,260,000 bushels). Severe losses from this disease have not occurred since 1978. Wheat streak mosaic was found in widely scattered fields of south central, central and north central Kansas; late infections occurred over parts of the northwest.

Powdery mildew, caused by *Erysiphe graminis* f. sp. *tritici,* caused an estimated loss of .1 percent (420,000 bushels). It was observed most often in thick-planted, heavily fertilized wheat in central and eastern Kansas, but above-average rainfall in the western third of the state allowed the disease to develop to damaging levels there as well.

Loose smut, caused by *Ustilago tritici,* and bunt, caused by *Tilletia foetida,* each caused an estimated loss of .1 percent (420,000 bushels). Loose smut was more prevalent in southern and eastern Kansas; bunt was reported from the same areas during harvest.

Leaf rust, caused by *Puccinia recondita* f. sp. *tritici,* reduced yields only by a trace. Infections occurred later than normal; it did not become prevalent in the state until late May.

Losses from barley yellow dwarf are estimated at a trace. A virus disease, it appeared most in the central third of Kansas, but infected fields were observed in widely scattered fields in the eastern and western thirds of the state. Aphid vector populations were quite low in the spring.

Losses from scab, caused by *Fusarium* spp., also were at a trace in 1980. This disease generally is most prevalent in the southeast, but is being seen more in irrigated wheat in western Kansas, especially following corn or sorghum.

No losses from stem rust, caused by *Puccinia graminis* f. sp. *tritici*, occurred in 1980. A few infections were observed in north central and northeast Kansas in June. It was quite light throughout the Great Plains, apparently due to a lack of inoculum.

A wheat disease called strawbreaker, caused by *Pseudocercosporella herpotrichoides*, was detected for the first time in the state in Lincoln County during late May. Subsequent surveys revealed it is present only in two Lincoln County fields at this time. Strawbreaker generally prefers long, cool, wet spring weather for development; how serious it will become in Kansas is yet unknown.

Fruit and Vegetables

Rains in late March and early April allowed cedar-apple rust, caused by *Gymnosporangium juniperi-virginianae;* fire blight, caused by *Erwinia amylovora;* and apple scab, caused by *Venturia inaequalis*, to develop on apple and crabapple in commercial orchards, home gardens and nurseries. Cedar-apple rust and apple scab were less prevalent than in 1979; fire blight more prevalent. These diseases appeared most in the eastern two-thirds of Kansas.

Peach leaf curl, caused by *Taphrina deformans*, was obvious in some peach orchards and on flowering peach in south central and southeast Kansas in mid- and late April.

Trees and Ornamentals

A wide variety of tree and ornamental diseases were reported. Leaf blister of oak and maple, caused by *Taphrina* sp., was fairly common in the spring. Twig blight of juniper, caused by *Phomopsis juniperovora*, was common in several nurseries in northeast and north central Kansas in June and July. Blue spruce plantings in central and eastern Kansas were affected by drought. Sirococcus shoot blight, caused by *Sirococcus strobilinus;* and needle case, caused by *Pestalotia* sp. Sirococcus shoot blight, confirmed from a sample from Saline County, established a new county record.

The pinewood nematode *(Bursaphelenchus lignicolus)* was detected in Brown, Doniphan and Montgomery counties in late 1979 and early 1980, establishing new records in those counties and bringing the total number of infested counties to five, including Cherokee and Crawford. The pinewood nematode again was active in Cherokee and Crawford counties in the fall. Numerous trees died in sites where the nematode had not previously been found. It appears more trees die when moisture stresses occur.

Turf

Root and crown rots, caused by *Fusarium* sp. and *Helminthosporium* sp., were the most common turf diseases in Kansas in 1980. These diseases were active due to drought conditions and were active in areas where water was applied regularly.

Rust, caused by *Puccinia* sp., and powdery mildew, caused by *Erysiphe graminis*, became active in the fall after rains. Slime molds also became active after fall rains. They are not pathogenic but are unsightly to most people.

SUMMARY OF INSECT CONDITIONS IN KANSAS IN 1980

K. O. Bell Jr., Survey Entomologist

Highlights

Alfalfa Weevil: seriously damaged scattered alfalfa fields; some of the worst damage was in Ellis, Rush, Barton, Lincoln, Saline and Ellsworth counties. Adults, sometimes along with **Clover Leaf Weevils,** held back regrowth after the first cutting; regrowth delay also was lengthened by drought in most areas and **Variegated Cutworms** in some.

Since its Kansas discovery in 1976, serious alfalfa damage by the **Blue Alfalfa Aphid** was not seen until spring 1980; serious damage apparently limited to isolated cases in southeast Kansas.

Unusually large numbers of **Chinch Bugs** promoted by uncommonly hot, dry weather caused the greatest damage to Kansas sorghum since the '50s or perhaps the '30s. It was impossible in most cases to separate the effects of drought from that of the chinch bug on sorghum. Together, they took heavy tolls on stands and yields.

Fall Armyworms: more abundant in crops than since 1976. The potential for late-season losses in soybeans and sorghum due to high numbers of **Corn Earworms** was much greater than in many years.

Problems with **Grasshoppers** were greater than expected. This was promoted by the effects of unusually hot, dry weather in many areas but hopper numbers were considerably greater than expected, particularly in parts of north central and northwest Kansas.

A new **Greenbug** strain, biotype E, was discovered in Kansas in 1980. Commonly grown sorghum varieties resistant to the old biotype C are not resistant to E. The greenbug caused serious damage to scattered wheat fields in parts of central Kansas during spring 1980. Heavy flights of greenbugs caused serious damage and some stand losses in scattered fields of seedling sorghum in the western two-thirds of Kansas. Scattered economic late-season greenbug infestations occurred in sorghum, mainly restricted to the western third of the state.

Field Corn

Armyworms: first reported in crabgrass in corn in Kiowa County the second week of July; caused serious defoliation of some grassy corn fields in Edwards and Kiowa counties by late July.

Black Cutworms: caused little damage to seedling corn stands; up to four percent stand reduction in Leavenworth County, up to nine percent of plants showed feeding damage in Bourbon County from mid to late May. Although moths appeared common in light and pheromone traps, larval populations were low, probably reflecting unfavorable weather conditions.

Kernel losses due to feeding mostly by **Corn Earworm** but also by the **Fall Armyworm** (heavy damage in scattered corn fields in south central and southwest Kansas) and **Western Bean Cutworm** estimated at $3.37 million for 1980. Losses were greater than in 1979 in most areas. Corn Flea Beetles caused little serious damage but were more numerous than usual in seedling corn, particularly in eastern Kansas during the first three weeks of May.

Corn Rootworm: damage to corn roots was more normal in Kansas following light damage in 1979. The statewide late season survey showed second generation **European Corn Borer** populations higher than in 1979 in the north central and northeast crop reporting districts; lower in the south central and all western districts. Hot, dry weather appeared to play a significant role in population suppression along with chemical controls. Few growers treated first generation European corn borer, but treating for second generation was common in some irrigated areas of south central and western Kansas.

Fall Armyworms: more abundant in various crops than since 1976. Greatest damage occurred in southern Kansas, sometimes included light to severe late-season stalk and ear shank tunneling in addition to the usual kernel loss in scattered late-maturing corn fields.

Grasshoppers: after moving out of drought-stressed pastures and waste areas, concentrated on corn fields in scattered areas, most notably in some areas of east central and southeast Kansas. Dryland corn in these areas often was salvageable only as silage due to the dry weather. Winged **Greenbugs** averaged as high as 25-30 per plant in two-leaf corn in Dickinson and Marion counties during the third week of May.

The annual survey showed late-season **Southwestern Corn Borer** populations more normal in 1980 in irrigated corn producing areas in central and south central Kansas. Populations increased somewhat over 1979 in the southwest but still were below the 1975-79 average. Field survey data on growth stage distribution of the first generation were used in a "model" developed by Kansas State University scientists to predict proper treatment timing to control second generation southwestern corn borer using either one or two treatments. This information was made available to growers through various media available to the Kansas State Board of Agriculture and the Cooperative Extension Service.

Spider Mites: (probably mostly **Banks Grass Mites**) troublesome in scattered western Kansas corn fields especially in some southwest counties in late July and August. There, the **Twospotted Spider Mite** again was verified in some cases not responding to chemical controls. Late-season corn surveys in west central and northwest Kansas during the last week of September revealed no serious corn damage by spider mites in fields examined.

Populations of **Western Bean Cutworms** were unusually low in western Kansas corn fields in 1980.

Sorghum

In very unusual cases, larvae, apparently **Beet Armyworms**, were found feeding on milk to dough stage sorghum kernels in heads and on sorghum leaves in scattered fields in southwest Kansas, particularly in Seward, Morton and Stevens counties during early to mid-September. This was found only where fields had substantial pigweed populations with larvae moving onto sorghum after defoliating pigweed.

Chinch Bugs: caused the most serious damage to sorghum since the '50s or possibly even the '30s. Migrations of first generation bugs from wheat into adjacent seedling sorghum fields resulted in major stand losses in scattered areas mostly encompassed by these boundaries: from Highland to Wamego to Strong City to Douglas in the east, west to about Norwich in the south, north to Hutchinson, Ellsworth, Jewell and Lovewell. Treatment failures were common. Extreme drought coupled with damage involving mostly second and third generation bugs resulted in stand destruction in a few to many fields of larger sorghum in these counties and possible others: Morris, Dickinson, Marion, McPherson, Ellsworth, Saline, Lincoln, Clay, Mitchell, Ottawa and Cloud. Substantial late-season buildups of mostly third generation but sometimes significant numbers of second generation also were noted in many sorghum and corn fields in many counties of the southeast, east central and northeast districts where first generation bug populations were low in small grains and caused little or no reported damage to seedling milo after migrating from maturing small grains nearby. In late season, at least a few chinch bugs were found in sorghum as far west as Phillips, Ellis, Rush and Edwards counties.

Unusually large Corn Earworm populations in heads of late sorghum threatened substantial losses in scattered fields and areas, mostly in east central and southern crop reporting districts from mid-August to mid-September. Early warnings enabled growers to avoid substantial loss. **Corn Leaf Aphids** were heavy in some sorghum fields in Gray County in late July.

Fall Armyworms: unusually abundant in whorls of late sorghum particularly in southern Kansas districts in August. Egg masses occasionally were found in heads of sorghum; when noted there were some who speculated that larvae hatching from such egg masses might completely destroy heads. Larvae, however, have a natural tendency to spread out in fields after hatching. Reports were received of high populations of fall armyworms in sorghum heads, but except for one questionable case in Comanche County, no high populations were confirmed in heads. Surveys showed the most abundant species by far in sorghum heads was the corn earworm. In headed sorghum, fall armyworms often were more abundant behind leaf sheaths and among brace roots than in heads. Some stalk lodging was noted related to extensive feeding by larger fall armyworms on sorghum brace roots in south central and southwest Kansas.

Dry weather and scarcity of green vegetation resulted in the unusual concentration of **Grasshoppers** in a Morris County sorghum field with serious field-wide defoliation by early August. Light to moderate field margin damage to sorghum by grasshoppers was noted occasionally in many areas, particularly in parts of east central and southeast Kansas from early July through August.

Heavy **Greenbug** flights to seedling sorghum over most of the western two-thirds of Kansas from mid-May to early June resulted in a few cases of serious stand damage or field loss due to lack of proper pest management. Most major losses were prevented through the timely use of pesticides aided in many areas by beating rains in late May. The greenbugs apparently originated from small grains. Economic late-season greenbug infestations were nearly all restricted to the western third of Kansas.

Heavy **Spider Mite** infestations were reported on sorghum during the latter half of July in Grant County; some control failures. Some unusually serious damage to seedling sorghum by large number of **THRIPS** occurred in Bourbon County the second week of June; possibly originating from maturing wheat in the area.

Small Grains

Army Cutworms: unusually scarce in wheat; no significant damage reported. By early June some wheat fields in Bourbon and Neosho counties reported defoliated by **Armyworms** with some beard clipping; larvae maturing; some parasitism was noted. Some serious damage also was reported in scattered rank or downed wheat in Sedgwick, Harvey and Lincoln counties by early June; seriously damaged a barley field in Edwards County by second week in June; some significant damage to wheat noted in Brown County.

Chinch Bugs: unusually abundant in wheat particularly in scattered areas and fields mostly bounded by: Highland, Wamego, Strong City, Douglas, Norwich, Hutchinson, Ellsworth, Jewell and Lovewell. Overwintered bugs particularly seemed attracted to thinner stands or short wheat where such conditions occurred fieldwide or in spots or certain areas within fields. Thin stands of wheat or short wheat sometimes showed apparent damage by large numbers of overwintered plus first generation bugs, but no data are available to quantify losses in wheat due to chinch bugs. Migrations of bugs from thin wheat that was maturing early perhaps because of damage, to thicker, taller wheat within the same field or in an adjacent field was verified in 1980. Persons finding them in the thicker, taller wheat after such migrations might make the mistaken assumption that all bugs were bred there.

First chinch bug eggs were found in oats in Montgomery County by May 8; by May 14 in wheat in Riley County. First hatching noted by May 29 in Riley and some adjoining counties. First major migration from maturing wheat into adjacent seedling sorghum was noted in a localized situation in northwest Chautauqua County by June 12; some minor migration also was noted in some northeast and central counties. Major migrations were underway in affected central Kansas areas by June 19; major migrations were delayed by later maturing wheat until late June further north in northern Riley, Clay, Marshall, Washington and probably in most other affected counties in the north central area.

Fall Armyworm: reached damaging numbers in isolated cases involving early wheat in some areas of these districts during September: southwest, south central, north central, central, northeast, and west central (latter unverified).

In September and October, **Grasshoppers** caused much less damage to wheat in western Kansas than in 1977-79. During those years most wheat damage in the area was by the **Migratory Grasshopper** which was unusually scarce in 1980. Though development was greatly delayed for unknown reasons, large nymphs of second generation migratory grasshoppers caused significant wheat field margin damage much later in the fall than usual (early November) at one location in Grant County. There was some speculation that relatively large numbers of differential and two-striped grasshoppers, common in waste areas and along roadsides particularly in parts of north central and western Kansas, would pose a threat to fall wheat. No significant damage was reported.

The **Greenbug** usually causes little damage to wheat in the spring but in 1980 outbreaks were common in scattered fields in parts of central Kansas, particularly in thin stands or short wheat in late April and May. In such situations stands often were further thinned and stunted, making them more attractive to the chinch bug. Greenbugs were scarce in Kansas wheat until mid-April when light flights were first detected by sticky traps at three locations in eastern Kansas. By late April, flights had ceased, but buildups from the original flight in wheat at one location in Riley County were rapid, reaching 50-100 per plant. Populations then increased at tremendous rates. Serious damage (browned fields or spots) was common in scattered fields of short or thin wheat at least in Reno, Harvey, McPherson, Saline, Geary, Dickinson, Riley, Marshall and Pottawatomie counties by mid-May. Some population decline was noted in the southernmost affected counties by mid-May due to natural enemies. By the third week of May, greenbugs had caused serious damage in Clay, Republic and Washington counties; populations still were building rapidly in some fields in Clay, Republic, Washington, Mitchell, Cloud, Lincoln and Ellsworth counties. Populations had stabilized or sharply declined in many infested fields in Riley, Clay and Marshall counties due to natural enemies by late May. Some wheat fields in the affected area were lost and plowed; many were salvaged by treating. Yields in many others probably were lowered substantially by this pest first and possibly some by the affects of the chinch bug later. Mild periods of winter weather allowed greenbugs to increase to damaging numbers by December in seedling wheat, particularly in the Wichita, Hutchinson, and McPherson area; also in isolated cases in the southwest.

Hessian Fly infestations continued to decline. Weather unfavorable to the fly, lack of volunteer wheat, and late seeding of wheat due to unfavorable soil moisture probably contributed to lower infestations. Statewide, tiller infestations averaged only two percent compared with four percent in 1979. Moderate (10-15 percent) to heavy (more than 20 percent) infestations occurred in some wheat fields in north central and central counties. About 60 percent of the fields in north central Kansas were infested. The acreage of wheat varieties susceptible to Hessian fly continues to increase with the release and wide acceptance of the variety Newton. Parker 76 and Larned varieties, resistant to Hessian fly, continue to show high levels of resistance with no sign of biotype development.

Oat Aphids *(Rhopalosiphum padi):* common on leaves of scattered wheat fields checked in central and north central Kansas, including Riley and neighboring counties during May; buildups favored by cool weather. **Pale Western Cutworms** and **Spider Mites** were scarce in western Kansas wheat in 1980. Non-damaging light to moderate infestations of **Winter Grain Mites** sometimes were found in south central Kansas wheat during November and December; heaviest in Cowley and Butler counties; some grower concern in Butler.

Alfalfa

Overall damage by **Alfalfa Weevil** larvae appeared up somewhat over 1979 but was very spotty in most affected areas. Serious infestations were noted or reported as common in Cowley, Sumner, Ellis, Rush, Barton, Lincoln, Saline and Ellsworth; heavy infestations probably also were common in some adjoining counties. Early cutting commonly was practiced as a control measure. Very dry weather following the first cutting slowed regrowth recovery. This was aggravated in scattered areas and fields by stubble feeding by large numbers of alfalfa weevils, usually adults. Damage by alfalfa weevil adults sometimes was worsened by that of clover leaf weevil adults and variegated cutworms. Because of the tendency of the clover leaf weevil to hide under litter within the crown and because many people were not familiar with this pest, its contribution to the problem often was overlooked. Unusually high counts of adult weevils were swept from alfalfa in Russell, Lincoln, Ottawa and Saline counties by December 5 (250-960/100 sweeps), and by December 17, substantial numbers of eggs were found in fields sampled in Ottawa, Lincoln and Russell counties (138-277 eggs per 100 stems).

Army Cutworm: a significant pest of alfalfa only in extreme northwest Kansas where growth of the first cutting was delayed in some fields.

Alfalfa Caterpillar: unusually abundant in alfalfa, particularly in scattered areas of southwest and some western counties of the south central district.

For the first time recorded, **Blue Alfalfa Aphids** caused significant damage to Kansas alfalfa. It appeared, however, that damage was limited to widely scattered fields in a few counties of the southeast district and to spots within affected fields. Both blue and pea aphids were common in affected fields, but blue alfalfa aphids made up most of the population in affected spots. Counties in which at least one damaging infestation was noted included Montgomery, Elk and Butler counties of the southeast district; similar situations likely occurred at least in some adjoining counties. The damage period ran from mid-April in Montgomery County through early May in Butler County.

Grasshoppers: mostly differential and two-striped damaged alfalfa fields (mostly margins) in many areas, most commonly in an area in northern Kansas from Jewell, Smith and Osborne counties in the east to Cheyenne and Sherman in the west and in parts of southeast Kansas.

Scattered August and September-seeded stands of alfalfa were damaged or lost to **Fall Armyworms** in some areas of northeast, north central, central and south central Kansas. Adding to the problem were varying numbers of other caterpillars in seedling alfalfa including the alfalfa caterpillar, beet armyworm, garden webworm and yellowstriped armyworm.

The **Pea Aphid** was much more abundant than usual, damaging isolated alfalfa fields, particularly across southern Kansas. Some alfalfa was treated by March 28 in Montgomery County, by April 18 in Cowley County and by May 2 in Edwards County. Probably this species reported heavy in scattered alfalfa fields in parts of southwest Kansas during early June where early cutting usually was recommended.

The **Variegated Cutworm** was found holding back alfalfa regrowth after the first cutting in Ottawa and Ford counties during late May and early June; probably also a pest in some adjoining counties and other areas.

Soybeans

In recent years, soybeans have had fewer insect problems than other Kansas crops. Unusually dry weather reduced yields in 1980. **Corn Earworms** were found in unusually high numbers in soybeans from mid-August to early September, principally in southeast and east central districts. Isolated problems also were reported in northeast and south central Kansas. Many growers adequately controlled the pest, assisted by early warnings through the media, but some significant losses were noted during surveys. Though usually very scarce, **Fall Ar-**

myworms sometimes were noted in soybeans; in an unusual situation as many as 10 small larvae per row foot were found in a late field in Kiowa County Sept. 12. Considerable field margin soybean damage by **Grasshoppers** was noted particularly in parts of southeast and east central Kansas; damage was enhanced greatly by the effects of dry weather.

Turf Insects

White Grubs (three-year cycle): seriously damaged a buffalo grass lawn in Pawnee County by Mid-May and an annual white grub (one-year cycle) caused serious damage to lawns and commercial turf over much of eastern Kansas by mid-September; noticeable damage probably was greatly enhanced by additional stress on grasses by the severe drought.

Pasture and Rangeland

Grasshoppers: economic numbers (eight or more per square yard) in scattered pastures and rangeland mostly in parts of the western half of Kansas and most frequently in Cheyenne and parts of Rawlins County. A beneficial grasshopper was found in unusually large numbers feeding on snakeweed in parts of Logan, Gove and Scott counties; some ranchers in the area were concerned that it might also be a grass feeder.

Armyworms: caused significant defoliation of some brome and fescue pastures in Bourbon and Neosho counties by early June and in unusual cases caused heavy defoliation of brome pastures in localized situations in Jackson and Jefferson counties by mid-September.

Vegetables

Grasshoppers were more troublesome than usual, enhanced by hot, dry weather. Other problem garden insects reported included aphids on crucifers, carrot weevil on carrots, cranberry spanworm on asparagus, cutworms on various vegetables, diamondback moth on cabbage, eggplant flea beetle on eggplant, imported cabbageworm on crucifers, striped cucumber beetles on cucumbers, squash bug on squash and hornworms on tomatoes.

Small Fruits

Some field data on life history of **Strawberry Leafroller** in Riley County: overwintered larvae found on strawberry plants by May 1; large larvae and pupae noted by May 15; small first generation larvae found by May 22 and a few had pupated (no emergence) by June 5; a few first generation moths by June 12.

Deciduous Fruits

Moth flights for listed pests were monitored in selected orchards in eastern Kansas during the growing season using pheromone-baited "sticky traps": codling moth in apple and Oriental fruit moth and peach tree borer in peach orchards. First of season—codling moth in Neosho and Shawnee counties by May 8; Oriental fruit moth in Wichita, Manhattan and Topeka by April 24; and peach tree borer in Wichita by June 9, in Manhattan and McCune by June 16.

Ornamental Plants

First-of-season **Pine Tip Moths** were detected in Saline County by April 23; light to moderate in pine terminals in three Saline County nurseries by July 10. First hatching of **Bagworms** was noted in Topeka on May 30; small bagworms were seen on junipers in Lyon County during the second week of June; not particularly serious in 1980. **Black Vine Weevil** adults were found in large numbers on Blue Rug juniper in a home landscape in Johnson County in late June. They later were found to have caused some foliar damage to nearby euonymous.

Other ornamental pests of interest in 1980 included the Genista caterpillar on

Laburnum sp.; spruce needleminer on spruce and spruce spider mite on junipers; and webworms heavy on cedars in parts of Kiowa County by mid-June.

Forest and Shade Trees

More important shade tree insects included heavy **Aphid** populations on some maples in Manhattan in early May; a **Sawfly,** *Periclista* sp., commonly defoliated pin oaks in Sedgwick County by third week of May; **Elm Leaf Beetle** egg hatch well underway in Riley County by third week of May, in Kiowa and Ford counties by late May, and in Thomas County by second week of June; **European Elm Scale** heavy on American elm at one location in Colby in second week of May; first crawlers noted in Kiowa County on June 5; maple petiole borer on maples near Wichita third week of May; first hatching of **Spring Cankerworm** noted on crabapple in Manhattan by April 17, reported causing heavy defoliation of shade trees in Coffeyville and Independence by early May.

Humans and Animals

Large numbers of flying **Chinch Bugs** reported a nuisance by getting into eyes and interfering with breathing of farm laborers and growers harvesting or plowing down sorghum during late season in heavily infested areas; late summer and fall flights sometimes also a nuisance to people around farm houses and other buildings and even in some cities. **Black Flies** were a nuisance in parts of Kingman County April 10 and in Marshall County by May 15. Mosquitoes a nuisance in Greensburg the first week of June.

Households and Structures

Clover Mites a nuisance entering homes in Shawnee County by early April; reports common from many areas of Kansas by the third week of April.

Beneficial Insects and Insect Diseases

An **Aphidiid Wasp,** *Lysiphlebus testaceipes,* as usual, the major parasite commonly assisting other natural enemies in holding down and stopping greenbug buildups in small grains in May, in sorghum in August. Major predators often found helping this wasp in greenbug control were large numbers of **Lady Beetles** and **Syrphid Fly** larvae (the latter principally confined to small grains). An **Aphidiid Wasp,** *Aphidius* sp. *smithii?* was much more abundant than usual and useful in holding back pea aphid numbers in alfalfa but no evidence was obtained indicating it was capable of attacking the blue alfalfa aphid. The most common predators found attacking both pea and blue alfalfa aphids in alfalfa were lady beetles and syrphid larvae.

An **Ichneumonid Wasp,** *Bathyplectes curculionis,* a parasite of alfalfa weevil larvae, scarce in Kansas alfalfa in 1979 and 1980. A **Weevil,** *Rhinocyllus conicus,* introduced into Kansas to assist in control of the **Musk Thistle,** has become established in many release areas with some degree of control already observed. Less adults than usual escaped from infested thistle heads at a site in Shawnee County; possibly related to the extreme heat in the 1980 growing season.

A **Virus,** probably *Borrelina campeoles,* usually prevented serious defoliation of alfalfa by the **Alfalfa Caterpillar** in parts of western and south central Kansas.

A **Fungus,** *Beauveria Globulifera,* was scarce in **Chinch Bugs.** A **Fungus,** *Entomophthora grylli,* was scarce in grasshoppers, related to the dry weather. A **Fungus,** probably *Entomophthora aphidis,* destroyed small to moderate numbers of **Pea Aphids** in scattered eastern Kansas alfalfa fields in the spring. By mid-July, **Predaceous Mites** sometimes were common in **Spider Mite** colonies on corn in some southwest Kansas areas.

Federal and State Programs

Problems with first generation **Chinch Bugs** mostly followed boundaries indicated by the 1980 winter **Chinch Bug** survey; however, serious problems occurred farther west than was anticipated in some areas. This was partly due to difficulty in finding good sampling sites in those areas, but sometimes due to inadequate county coverage.

Grasshoppers were more of a problem than anticipated based on the 1979 adult survey, in part due to the effects of the severe drought of the 1980 growing season and possibly because the 1979 survey was completed later than planned in some areas. The drought resulted in early migration of hoppers from pastures and weeds along roadsides and other waste areas after drought made them unattractive to hoppers. They then began to concentrate feeding in margins (and sometimes entire fields of alfalfa) or more attractive row crops and gardens nearby. More grasshoppers than anticipated, both on range and cropland, were noted particularly in western parts of north central and parts of the northwest districts in 1980. Low nymphal mortality due to late onset of hatching and lack of disease due in part to dry weather added to the problem.

Results of the 1980 survey of the adult (potential egg-laying) grasshopper populations indicated that economic (eight or more per square yard) numbers on **rangeland** in 1981 are most likely to occur with greatest frequency in Cheyenne, Rawlins and Comanche counties. Threatening infestations that could lead to economic infestations in 1981 with conditions favorable to grasshoppers were found in many areas scattered throughout the western half of Kansas and part of the Flint Hills from Junction City to southern Chase County. Rangeland as defined here does not include improved pastures, which are included in the cropland outlook. The 1980 adult grasshopper survey on cropland indicated that areas most likely to have economic populations (eight or more per square yard in fields; 21 or more in field margins and other adjoining waste areas) in 1981 principally include parts of Phillips and Rooks counties. Areas which had significant numbers of sites with threatening numbers (3-7 field; 11-20 margin) of egg-laying grasshoppers that might give rise to economic numbers under conditions more favorable than usual include areas from Jewell through Cheyenne counties. Parts of Graham, Rooks, Kiowa, Chase, Morris, Geary, Jackson and Greenwood counties also had significant numbers of sites with threatening numbers. Problem infestations in other areas, if they occur, are expected to occur with less frequency.

More or less grasshoppers than anticipated may actually occur in any area of Kansas because of the non-predictable direct and indirect effects of weather on grasshopper populations. The survey measures neither the actual number of eggs laid by grasshoppers in the various areas nor the number of eggs destroyed by parasites and predators, all of which could vary greatly from year to year.

Japanese Beetle trapping in a Kansas City rail yard yielded a total of four for the 1980 trapping season, as in 1979; the data do not indicate established populations. No **Gypsy Moths** were caught in pheromone baited traps set in many locations concentrated in eastern Kansas.

Detection

A **New State Record** was established for the **Black Vine Weevil,** *Otiorynchus sulcatus;* taken on blue rug juniper at a residence in Olathe, Johnson County.

Acknowledgements—Contributors to information summarized are far too many to list, but broadly speaking, many persons in these groups were involved: students; Experiment Station and Extension Service of Kansas State University; entomology, control, weed and pesticide divisions of the Kansas State Board of Agriculture; various persons involved in pest management advisory services; representatives of chemical companies and pesticide applicators; U.S. Department of Agriculture's Science and Education Administration and Animal and Plant Health Inspection Service; and seed company representatives and growers. The majority of the information, however, was gathered by county, area and state Extension personnel involved with pest management and plant protection personnel of the division of entomology of the Kansas State Board of Agriculture.

KEN BOUGHTON
DIRECTOR

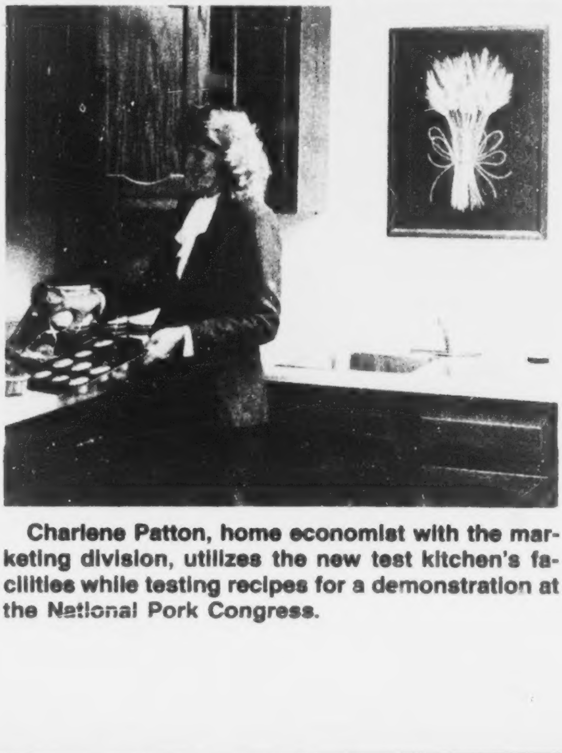
MARKETING DIVISION

Domestic and export market development activities are the focus of the various sections of the marketing division.

Market Development and Promotion—

A New Kitchen for Product Performance Tests

Testing recipes using Kansas agricultural products has been an integral part of the marketing division's market development and promotion program for nearly 25 years. Besides developing and adapting recipes for a variety of Kansas products, staff home economists also test new products. These tests, to assure dependable performance under the variable conditions in typical home kitchens, are completed for all recipes used in division publications, public demonstrations, television presentations and news releases. The careful selection and testing of the



Charlene Patton, home economist with the marketing division, utilizes the new test kitchen's facilities while testing recipes for a demonstration at the National Pork Congress.

popular recipes used in promotions have given the division a reputation for dependability.

Since the Board of Agriculture moved to a new location in 1980, testing has been done in the division's first test kitchen, a part of the new office space. The kitchen is equipped as a home kitchen with additional storage space for equipment and display materials used in demonstrations, television programs and exhibits of various types.

Recipes tested for distribution are designed to reflect the latest in food trends, to contribute to nutritious family diets and to utilize as many Kansas agricultural products as possible. Newly developed recipes are evaluated by a test panel from the marketing division staff to ensure each recipe meets the established guidelines and criteria used in the division's promotional programs.

The kitchen is used to test the performance of "new" products as they appear on the market for consumer use. The kitchen also allows home economists to prepare Kansas products using new appliances. Testing products with different appliances gives the staff experience in using the product as well as awareness about the product and different methods of preparing it. In that way, they learn useful information which they can relay to consumers.

Market Exports—

Kansas Exports Grow

The role of U.S. agriculture as the world's leading exporter of agricultural products supports the fact that U.S. agriculture and the world are becoming increasingly interdependent. The importance of foreign trade cannot be overemphasized. One of every five dollars the Kansas farmer earns comes from the sale of products overseas.

Activities of the marketing division have contributed significantly to the record-breaking growth of Kansas agricultural exports over the past 10 years. Kansas is most noted for its exports of wheat, but soybeans, feed grains, livestock and processed foods also have contributed to the total volume of overseas trade. For example, in September 1980, a Japanese food-buying team attended the third annual food show in Kansas City sponsored by MIATCO (Mid-America Interna-

Japanese food buyers sample a barley coffee substitute exhibited by the F. L. Wilson Company at a MIATCO-sponsored food show in Kansas City. The new Kansas product has been meeting with good acceptance in health food and specialty stores.

tional Agri-Trade Council). Thirty-six Midwest companies displayed products. Among these were three Kansas companies with such products as coffee substitutes; organically grown wheat and soybeans; popcorn; honey and beekeeping supplies. Projected sales by the 36 companies in attendance for the first year are $2,740,000.

For the livestock exporter, the 1980 American Royal International Program continued to attract foreign producers to its events. Eighteen countries were represented during the two-week show. Tours of local farms, ranches, experiment farms, dairies and university research facilities were provided for the interested groups and individuals. They also were treated to snacks and beverages made from Midwest products prepared by division staff in the International Room at the Royal.

The likelihood that world dependency on U.S. agricultural exports in the years ahead will increase is very real.

Kansas Commodity Commissions—

Commissions Are Bullish On Feed Grains and Soybeans

Kansas not only is a leader in grain production. It also leads in programs to help farmers sell that grain. Checkoffs from sales of corn, sorghum and soybeans go directly into programs to benefit the farmer. Market development and promotion of these grains, and research programs to improve disease and insect resistance are types of programs the commodity commissions strive to implement.

The Malaysian milo project initiated by the Kansas Grain Sorghum Commission and the U.S. Feed Grains Council in 1979 is complete. Its final report demonstrated positive results. The 40 tons of Kansas milo donated for use in the study proved to be an economical and high performance livestock feed under Malaysian conditions.

Malaysia is a country with an expanding livestock industry and what could be an expanding market for U.S. feed grains. Livestock feeders in that country, however, had consistently refused to use grain sorghum as a feed ingredient because of previous bad experiences with high-tannin, bird resistant sorghum grown in countries other than the U.S.

Malaysians Like Sorghum

Malaysian researchers concluded from the feeding trials that sorghum can be used to substitute totally for corn in hog diets without significantly affecting performance. The diet consisting of equal amounts of sorghum and corn outdid both diets consisting of sorghum or corn alone. The cost-benefit analysis concluded the sorghum-corn based diet produced the largest gross and net profit for livestock feeders. It now is being recommended to Malaysian feeders as giving a high profit margin. The project has paved the way for greater interest in the use of grain sorghum and will help lead to a greater demand for Kansas milo in world markets.

Kansas State University researchers working on projects funded by each of the commodity commissions provided further results in areas of disease and insect problems in corn, grain sorghum and soybeans.

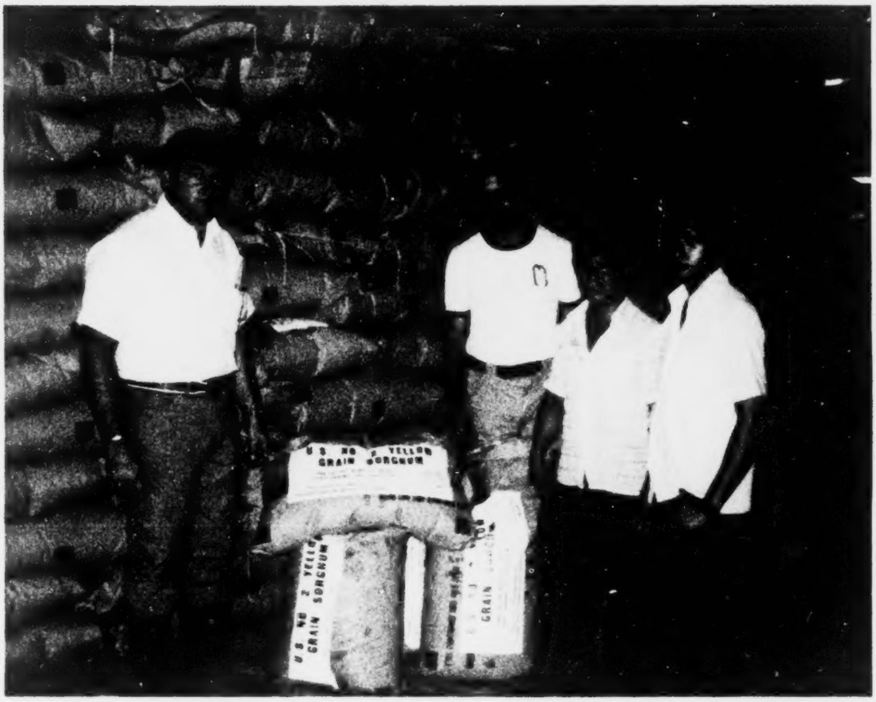
Corn researchers have utilized a grant from the Kansas Corn Commission to determine the effect of viruses on corn yields and to identify corn lines that permit seed-borne virus transmission. Test results showed that early virus innoculation caused yield losses and that virus transmission is not carried over in corn kernels; therefore, it is not a source of virus in commercially planted fields. Further results indicated the virus is not seed-borne in grassy weed hosts. Other Corn Commission-sponsored research deals with the effect of abiotic and biotic stresses on root and stalk rots. Yields are measured and compared between various irrigation schedules and their effect on stalk rot development.

Sorghum researchers, through the support of the Kansas Grain Sorghum Commission, have achieved major accomplishments on a study of the development of sorghums that are resistant to production hazards. Areas of concern dealt with so far include the identification of populations of major genes for resistance to a greenbug biotype, the demonstration of chinch bug tolerant sorghums, and the development of a laboratory procedure for the evaluation of sorghum seedlings for resistance to chinch bugs.

Support Continues

The commodity commissions continue their involvements in international market development by supporting the American Soybean Association, U.S. Feed Grains Council and the U.S. Meat Export Federation. Such agencies continue to provide feed grain and soybean growers with an overseas outlet by expanding marketing channels.

The International Grains Program in Manhattan, through its promotional and educational endeavors, is providing a natural demand for Kansas grains. In 1980 the IGP hosted 30 teams involving grain processing, storage and purchasing. Short course activities presented to these teams involved more than 140 participants dealing with in-depth training in milling and manufacturing areas. In addition, the IGP provided lectures in three foreign countries where more than 200 participants were exposed to technical training and practice. The program exposes potential foreign buyers and government officials to U.S. grains and their products, encouraging the development of new and intensive markets for Kansas grains.



Michael Callahan, left, U.S. Feed Grains Council Southeast Asian director, stands with Malaysian researchers as they inspect grain sorghum arriving in Malaysia from Kansas. The sorghum was used in feeding trials conducted to compare the performance of growing-finishing pigs fed three different rations for purposes of comparison of Kansas grain sorghum.

PROCESSING
BEEF • POULTRY
QUALITY MEATS

LARRY D. WOODSON
DIRECTOR

MEAT AND POULTRY INSPECTION DIVISION

Humans have attached importance to both the source and the handling of meat and poultry products since the beginning of time. The following quotations from the Bible illustrate this point.

Exodus 22:31 "You shall not eat any flesh that is torn by beast in the field; you shall cast it to the dogs."
Deuteronomy 14:21 "Ye shall not eat any thing that dies of itself."
Leviticus 7:19 "Flesh that touches any unclean thing shall not be eaten."

History

In 1906, Upton Sinclair published "The Jungle." The book was an instant success, focusing public attention on about 12 of the 308 pages concerned with some gruesome details of meat production. These described situations such as the grinding of poisoned rats; using hogs killed by cholera to make a fancy grade of lard, and selling the carcasses of steers condemned as tubercular to food markets.

Following a government investigation the same year, in which equally disturbing findings were reported to the House and Senate, a comprehensive meat inspection law was passed in June 1906. President Roosevelt felt this new Meat Inspection Act "would ensure wholesomeness from the hoof to the can." The Act, however, only covered meat that crossed state lines.

In 1967, Congress was asked to consider new and more comprehensive meat inspection legislation. President Johnson signed the Wholesome Meat Act in December 1967, describing conditions that still existed at that time.

"A man was wrapping pork shoulders. He dropped one in the sawdust, picked it up and wiped it off with a dirty, sour rag. Beef was being broken on an open dock, by a dirt road, in 95 degree weather. There were flies in the meat. Drums of bones and meat scraps were covered with maggots."

The Federal Wholesome Meat Act of 1967 brought all slaughtering and processing plants under federal jurisdiction regardless of whether they were doing business within the state or across state lines. This act also gave each state the option of developing its own meat inspection program. The 1969 session of the Kansas Legislature passed the Kansas Meat and Poultry Inspection Act.

Under the Kansas act, all slaughtering and processing plants selling products within the state must be inspected by the Kansas Department of Agriculture.

Smaller, individually owned specialty houses still can operate even today when large volume operations are the rule. This Topeka plant produces chorizo, a Spanish semi-dry cured pork sausage.

Producers slaughtering animals of their own production on their own premises for their own use are exempt from the provisions of the act and regulations. Retail stores and restaurants also are exempt, providing they handle only inspected and passed meat and meat products and are under sanitation inspection by some other state agency.

Plants that slaughter either livestock or poultry, and those processing carcasses into meat or poultry products in intrastate commerce, come under the provisions of the act. These can be broken down into the following categories.

Inspected Plants—Inspected plants are those in which inspection is performed before, during and after the slaughter of all animals. The plant also is inspected for sanitation, processing and product labeling. Carcasses and parts of carcasses bear the inspection legend and can be sold to all outlets within the state.

Custom Plants—Custom plants slaughter or process animals and carcasses for their owners to be used by the owner, members of the family, former family members, nonpaying guests and employees. Ante- and post-mortem inspection of the animals offered for slaughter is not provided to these plants, but the plant is checked periodically for sanitation, labeling and adulteration. No product is bought or sold. The carcasses and packages are stamped "Custom—Not For Sale."

Combination Plants—In a combination plant, all product that is to be sold into intrastate commerce is inspected (just like the inspected plants), and all product derived from the slaughter of custom animals is not inspected (just like the custom plants).

Curtis Exempt Plants—As an afterthought to the Wholesome Meat Act of 1967, Senator Curtis of Nebraska successfully introduced the Curtis Amendment to the Wholesome Meat Act. This in essence provides that custom plants may buy and sell either state or federally inspected and passed product, providing that either physical or time separation is maintained between the inspected and uninspected product. The Kansas Legislature followed with the same amendment to the Kansas Act.

Meat and Poultry plants registered with the division are as follows:

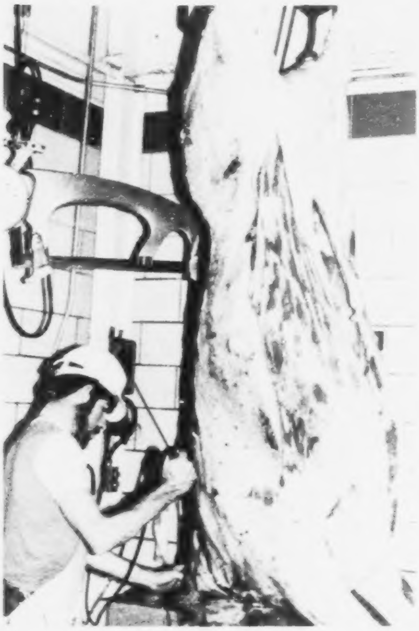
179	Inspected Plants
49	Custom Plants (this includes 23 Curtis Exempt operations)
9	Combination Plants
59	Other (includes jobbers, distributors and pet food manufacturers)
57	Federal Plants

The Kansas meat inspection program is designed "equal to" the federal meat inspection program. In order to maintain the "equal to" federal status, state inspected plants are reviewed quarterly by the federal meat inspection service. A random sample is drawn from the various types of plants which are reviewed. Seven basic criteria are used for evaluations, including ante-mortem and post-mortem inspection; reinspection (processing); sanitation; water supply; sewage and waste material control; pest control; and condemned and inedible material control. If federal review officers find any of those items unacceptable for any reason, a plant is given a five-working-day written notice to correct the deficiencies, then re-reviewed for acceptability. A total of 69 Kansas plants were reviewed by federal officials in 1980. Only four of these were found to be unacceptable during the initial review; all four were acceptable in the follow-up review.

1980—The Year In Review

The year began with a threat to the funding of the meat and poultry inspection division. Originally, the state of Kansas and the federal government shared administrative costs of the program equally. In 1980, however, USDA informed all 31 states with state meat inspection programs that federal monies granted would be less than the amount requested by each state. The problem was not new—the states previously had been informed that federal fiscal year 1979 and 1980 levels of funding would be based on 1978 expenditures. No additional money for inflation, salary increases, mileage or per diem increases would be granted.

USDA's "tight money policy" made it necessary to implement various cost saving measures. The responsibilities of the in-plant meat inspectors were increased to include making the final disposition on animals with conditions not related to diseases. This policy originally began in 1979 and became the standard policy of the division. Animals with minor cuts or bruises, broken legs with no infection or elevated temperature, split pelvis as a result of a fall, or other recent injury—"down" animals could be "finaled" by the in-plant inspector without having to call a veterinarian. Continued implementation of this new policy



Electric stimulators to tenderize beef are becoming more common. Here a plant employee is inserting the stimulator probe into a beef carcass.

realized a substantial savings of tax dollars without decreasing the effectiveness of the inspection program. Travel and overnight lodging were kept at a minimum. Schedules were monitored closely to assure proper utilization of all personnel assigned. Supervisory personnel provide vacation, relief and emergency slaughter inspection. Plant registration fees and overtime rates charged for inspection personnel were increased for the first time since the program began in 1969; combination plants were designated.

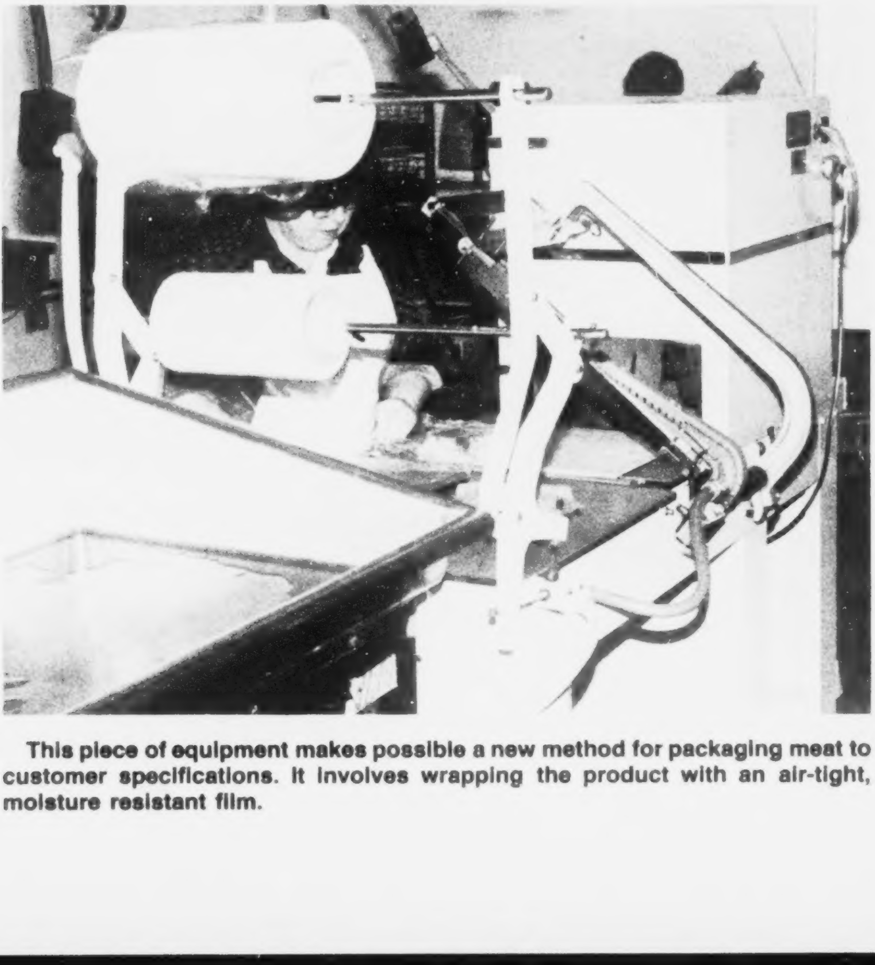
Near the end of 1980 the division was notified that additional funds from USDA were being made available. This will help alleviate some of the fiscal pressures, but the division continues to keep a close watch on all expenditures.

In spite of the state of the national economy, remodeling and new construction projects were initiated at various plants. New slaughter/processing plants were completed in the cities of Wamego and Tipton; plans for remodeling were reviewed for plants in Belle Plaine, Topeka, Olpe, Ottawa, Halstead and Melvern. New faces joined the meat industry in Kansas as change-of-ownership reviews were conducted at plants in Morganville, Spearville, Sabetha, Ashland, Crystal Springs, Logan, LeRoy, Girard, Caney, Natoma, Iola and Coffeyville.

The controversy surrounding the use of sodium nitrite to cure various meat food products eased somewhat during the past year. Originally, Dr. Newberne of the Massachusetts Institute of Technology had concluded that sodium nitrite itself caused cancer in laboratory rats. A group of scientists completed a review of that study in 1980, reporting that the results of the Newberne study were inconclusive.

Sodium nitrite presently is the only curing substance known to prevent botulism. It appears that nitrite will continue to be allowed in cured meat food products for the time being.

The meat industry continues to adopt new technology. One of the latest innovations is electrical stimulation of beef carcasses. By this method, either a



This piece of equipment makes possible a new method for packaging meat to customer specifications. It involves wrapping the product with an air-tight, moisture resistant film.

side or a whole carcass is "stimulated" by an electric shock immediately after slaughter. The theory behind the stimulation process is that aging time in the cooler is reduced while the tenderness and flavor of the meat is increased. State-inspected plants at Olpe, Ottawa and Dighton installed stimulators in 1980.

Division inspectors continued to answer requests by various state institutions to assist with problems related to the purchase and specifications of meat and meat food products, or vendor compliance with those specifications. Certain institutions, for example, require a leaner ground beef for special dietary needs of their patients. During 1980, 582 samples were collected through this institutional compliance program. Two hundred sixty-one of those 582 samples did not meet institutional specifications; 58 of the 261 violations did not meet the requirements of the Kansas Meat and Poultry Inspection Act.

Commonly found violations in Kansas are "water added" hams. Kansas currently is the only state prohibiting "water added" hams from being marketed within its borders. At the end of the 1980 calendar year, it was learned that legislation to allow up to 10 percent "water added" hams to be sold in the state was going to be introduced into the 1981 session of the legislature. This bill was to be sponsored by the Kansas Pork Producers, Kansas Livestock Association and Kansas Restaurant Association.

Again in 1980, the division cooperated with USDA in the national residue sampling program. Samples taken by division personnel are sent to be analyzed by federal laboratories to evaluate the residue status of specific animal populations.

The categories of compounds covered by this program are chlorinated hydrocarbons (e.g. chlordane), organophosphates (e.g. malathion), antibiotics, sulfas, hormones (e.g. DES), trace elements, PCB's and various drugs. Samples assigned to Kansas plants are proportional with state volume compared to national volume of slaughter of the same classes of animals. This procedure assures that sampling from state plants is comparable to the rate for federally inspected plants.

Again in 1980, the most common violation found was in violative levels of sulfa residues in swine. Studies have shown that only one teaspoon of a sulfa drug in a ton of feed is enough to produce a carcass in violation of the allowed limit of sulfa residue. The violative rate in Kansas is no higher than the national average, approximately seven percent, and the swine industry constantly is trying new methods to eliminate these violations.

Polychlorinated byphenyls (PCB's) and DES received a lot of publicity in 1980. PCB's are compounds used in capacitors and transformers as heat retardants. They have been found to be carcinogenic. A survey at all plants under state inspection was conducted; no PCB-containing equipment was found. DES (diethylstilbesterol) was banned for use as a growth stimulant by USDA in November 1979. It is alleged that certain individuals continued to use existing supplies of DES after the ban went into effect. There currently is litigation involving the affected parties and USDA.

The division's laboratory staff continues to provide an integral part of the enforcement activities in the division. Every product that bears the "Kansas Inspected and Passed" legend must be labeled properly and conform to the standard of identity for that particular product. In 1980, the laboratory analyzed 2,022 samples in addition to the institutional samples mentioned earlier. One hundred forty of these samples were found to be out of compliance. Corrective action was taken by the division.

Training of inspection personnel is of paramount importance to the division. The inspection program is only as good as the inspectors that are employed. In 1980, more than 1,500 hours were spent in training new inspectors and providing continuing education for existing personnel.

Departmental Action

The scope and variety of Kansas meat and poultry inspection compliance staff activities is indicated by the following examples of action taken.

—10,000 pounds of ground beef out of compliance due to added water or excessive fat were discovered as a result of institutional compliance activities. They were either voluntarily destroyed or returned to the producing plants for reinspection and rework depending on the nature of the violation.

—907 pounds of "water added" pork products were returned to the plant of origin for distribution outside of Kansas.

—300 pounds of uninspected fryers were found in a school cafeteria and placed under the embargo authority of the Kansas Department of Health and Environment.

—1,377 pounds of beef hindquarters were found to be off condition on arrival at a state institution; returned to plant of origin for reinspection.

—840 pounds of beef cheek meat and beef trim out of compliance were voluntarily destroyed for human food purposes.

—28,199 pounds of boneless hams were contaminated as a result of a truck wreck; returned under state seal to producing plant for reinspection.

—One uninspected hog carcass (approximately 125 pounds) was found in a retail store; placed under the embargo authority of the local county attorney (a retail store must handle only inspected product).

The division made 390 random and planned compliance contacts, some of which were due to nine formal consumer complaints. Four hearings, one prosecution and twenty-three letters of warning resulted from these contacts.

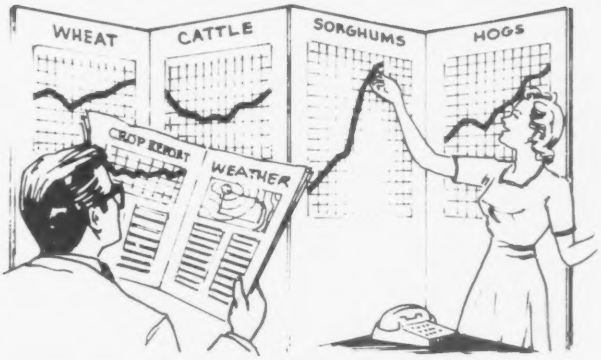
The compliance work is a means by which the division checks not only the efficiency of in-plant inspection but also further checks illegal movement of mislabeled or adulterated product, keeping it from reaching the Kansas consumer.

A Look Forward

Division veterinarians, inspection personnel and contract veterinarians condemn approximately 1,000 pounds of meat in Kansas every day, the equivalent of one beef and two hog carcasses. The meat and poultry inspection division continually is looking for ways to improve efficiency with the funds available. Most importantly, it will not sacrifice the integrity of the program at the expense of consumer confidence and protection.

An inspector for the meat and poultry inspection division examines the lungs and heart of an animal. The routine bovine post-mortem inspection involves many procedures, including this one and examination of the head.

M. E. JOHNSON
STATE STATISTICIAN



STATISTICAL DIVISION

The statistical division operates as the Kansas Crop and Livestock Reporting Service, a cooperative function of the Kansas State Board of Agriculture and the Economics and Statistics Service of the U.S. Department of Agriculture. Continuing an agreement of more than 50 years, it is a primary example of the state of Kansas working together with the federal government to provide efficiency in governmental operations.

The federal program provides state, regional and national estimates for major commodities. The state program complements the federal by providing county data and additional detail on commodities of particular importance to Kansas. The state program also provides a more widespread distribution of information important to the decision-making process for Kansas farmers.

Major Reports

The service provides an ongoing series of reports on crops, livestock and prices. Crop reports include a weekly crop-weather report, released each Monday at 3 p.m.; monthly reports on crop conditions; quarterly grain stocks; periodic reports on acreages and prospective yields; and the annual crop summary. Other major crop releases include special reports on varieties and quality of wheat in terms of protein, test weight and other factors important to the milling and baking industry.

Livestock reports include the semiannual inventories of cattle and the calf crop, monthly cattle on feed reports, quarterly hog and pig reports and monthly dairy and poultry reports. In the spring there is a report on the condition of Bluestem pastures and lease prices; in late fall, two reports are issued on wheat pasture conditions. Farm price reports are issued monthly. Reports on farm income and farm land values are prepared annually.

The bulletin series includes the "Farm Facts" section of the State Board of Agriculture's "Annual Report," the "Wheat Quality" bulletin prepared in cooperation with the Kansas Wheat Commission and Kansas State University, "Livestock Statistics" and "Custom Rates." All reports are free; individuals can obtain an order form for reports by writing the Kansas Crop and Livestock Reporting Service at 444 S.E. Quincy, Room 290, Topeka, Kansas 66683.

Information For Estimates

The major sources of reliable information for crop and livestock reports are those who know the most—farmers and ranchers, livestock feeders, slaughter house managers and grain elevator operators. They also make the most extensive use of the final estimates. Their cooperation is essential to a workable and useful program of data for decision-making in agriculture.

Mail surveys, telephone contacts, personal interviews and in-the-field observations are among the methods of collecting data. Most estimates are based on sample surveys, meaning that what is happening with the total group can be inferred accurately from contacts with a selected portion of the total. Not only is sampling less costly than a complete count in terms of time and money, but it also can be more reliable.

Mail Surveys

In most mail surveys, questionnaires are sent to a sample of farmers as a means of collecting information for an array of agricultural activities including acreages, yield and production, livestock and poultry inventories, intentions to produce, farm employment and wages. Thousands of producers and others have been participating in the voluntary mail surveys for as long as they have been associated with agriculture.

The mail survey technique achieved its early success because the state had literate farmers who were willing to respond voluntarily to survey questionnaires. Mail service was inexpensive and dependable, and a five-year agricultural census provided periodic benchmarks for "trueing up" the estimates. The mail method, quick and economical, was refined over the years to a high degree of perfection.

The mail survey, as an exclusive data collection technique, particularly was suited to the time when there were more than twice as many farms as today and most had similar characteristics . . . cows, meat animals, chickens, vegetables, pastures, grain fields and fruit trees. The replies of farmers who answered the mail questionnaires from all parts of the state were considered representative of Kansas agriculture.

But as farms became specialized, fewer in number and often larger in operation, the general mail questionnaire method alone was not sufficient for the accurate estimates needed in agriculture. For example, not all farmers receive questionnaires. Of those who do, not all respond. Respondents may not be representative of the full group because of differences between their farms and those of others not in the sample. New and more reliable data collection methods were developed.

Probability Surveys

To overcome the shortcomings of general mail surveys, the Crop and Livestock Reporting Service developed and implemented probability surveys for much of its work. Statistical theory provides a basis for selecting samples so the chance, or probability, of each farm or farmer being in the sample can be compared. This offers three definite advantages—first, since the sampling errors can be determined, estimates can be made with a known degree of precision; second, since the probability sample assures a cross section of farms, the estimates are not biased as they may be when the sample is not representative—like the older mail surveys; and third, the results of the survey stand alone without depending on relationships to another set of data, such as a census.

These probability surveys generally are based on farmers with land in acres selected for sampling—an area frame—or based on a sample from a list of producers—a list frame.

Area Frame Samples

The area frame portion of a probability survey uses a sample of randomly selected land segments, varying in size but averaging about one square mile in major agricultural areas. Segments in open rangeland, such as that found in western Kansas, usually are much larger than segments in or near cities and towns which will be one-fourth square mile or less. The total land involved in the segments selected for survey purposes is less than one percent of all the land in the state. The area frame is stratified for sampling purposes into four broad categories based on current land use: areas intensively cultivated for crops;

extensive areas primarily used for grazing and producing livestock; residential and business land in cities and towns; and non-agricultural land such as parks and military complexes. Segments are defined within each category of land use, or stratum, and a sample is selected.

List Frame Samples

The land area frame provides complete coverage, is not made obsolete by changes in farm boundaries or operators, and offers safeguards against omission and duplication. An additional sample source, however, is needed for surveys in which the commodity to be estimated is highly concentrated, such as cattle and hogs. Estimates of these commodities demand more precision than is available from an area sample, so the Crop and Livestock Reporting Service also maintains list frames which consist of producers' names and addresses and the size of their units which are sampled for survey purposes. The primary input for these list frames is county appraisers' annual agricultural statistics tabulations, but constant checking of names against other available sources ensures the lists are kept reliable and current. In a typical livestock survey, some 2,000 names are selected as the list sample to receive questionnaires. Those who do not respond are contacted by telephone or in person. Usually about one-third of the selected operators respond to each method of contact. In addition, operators from the area frame sample who are not on the list are interviewed personally to obtain livestock information.

Multiple Frame Samples

In collecting data for several commodities, statisticians frequently take advantage of the attributes of the area and list frame samples together, a blending called multiple frame sampling. Most of the survey information is collected from the list frame. The area frame is used to represent those operators whose names are not on the list.

Theoretically, two criteria must be satisfied in multiple frame sampling. All farms must be associated with one of the sampling frames, area or list, then farms appearing on both lists must be identified so the duplication can be removed.

Nationwide Enumerative Surveys

Each June and December, all state statistical offices in the nation conduct a major survey based on samples selected from area and list frames. The farmers are visited by field interviewers—enumerators—for a firsthand accounting of agricultural activities. The June Enumerative Survey collects data on crop acreages, livestock numbers, farm labor and wages. It produces state, regional and national estimates.

The December Enumerative Survey covers a subsample of the farms visited in June to provide data for estimates of livestock inventories and production, along with acres seeded to fall grain crops.

The national probability sample for June includes about 16,000 area segments—roughly .7 of one percent of the total land area in the 48 contiguous states—and will identify some 60,000 farm operators for interviews. Enumerators also will contact approximately 17,000 extremely large livestock farms. There are 435 area segments in the Kansas sample.

Enumerators, working out of state offices, use county road maps and aerial photographs to define precisely the boundaries of the selected area segments. After locating the appropriate farmers, the enumerator explains the purpose or importance of the survey and asks a specific series of questions. All operators' survey answers are recorded carefully. The completed questionnaires are sent to the state office to be checked for completeness and consistency for use in making the estimates.

Quality controls maintain the integrity of the survey. The part-time enumerators are carefully selected and trained. They receive detailed instruction manuals and close field supervision. Other controls include built-in questionnaire checks, comparison of reported acreages with acreages measured on the aerial photographs, and re-enumeration of some segments by supervisors.

Sampling errors for major agricultural items from the June survey average about four to eight percent on a state basis; about two to three percent on a regional level; and about one to two percent for U.S. totals. A sampling error of one percent means chances are about two out of three that the sampling estimate is within one percent of the result which would be obtained if the same procedures were used to survey the entire population rather than just a sample of it.

Objective Yield Surveys

A sample of fields located in the segments selected for the June Enumerative Survey are visited during the growing season for plant counts, measurements and crop development information to determine yields and to project production.

With the farmer's permission, enumerators walk a given number of rows and paces into the selected fields to mark off a sample unit with no attention paid to the condition of the field or quality of the crop and unit. This practice assures objectivity by removing the human bias which could affect the ultimate estimates for Kansas. These objective yield surveys are conducted for corn, wheat and soybeans. In 1981 sorghum grain will be added to the objective yield program.

Areas Specified

The unit for corn is a two-row section 15 feet long; for wheat, three drill rows 21.6 inches long; and for soybeans, a two-row section three feet long. At the designated units in the field, the enumerator counts the number of plants and measures the distance between rows, indicating plant population per acre. Next, the immature and mature fruit are counted, such as soybean nodes and pods, wheat heads and spikelets, and ears of corn. The stage of development is determined to gauge the yield per plant. The data on plant population per acre and projected yield per plant allows statisticians to arrive at an estimate of yield per acre. This yield is multiplied by the acres for harvest for state production forecasts.

Visited Regularly

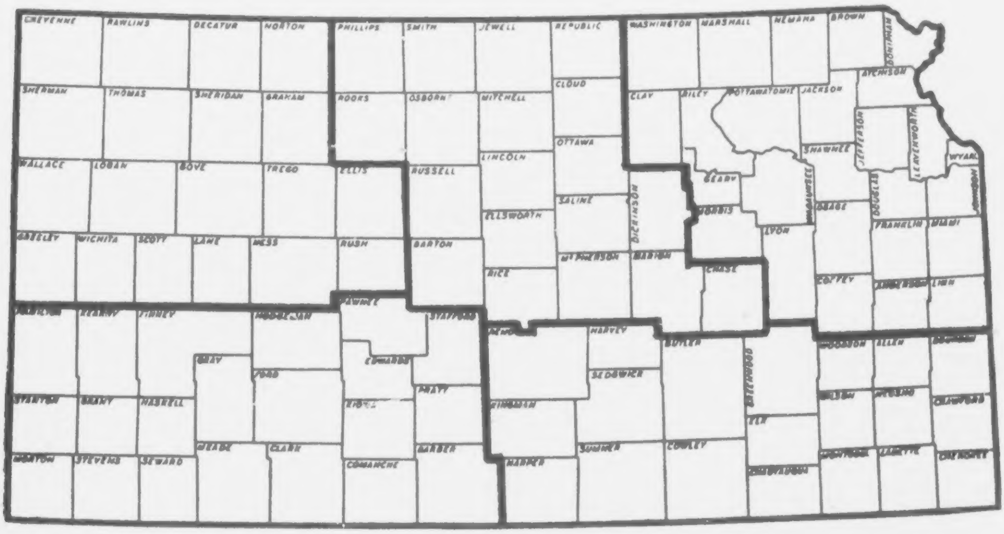
The enumerators repeat these visits monthly during the growing season. When the crop is mature, they hand-harvest the sample unit and send a sample to the office laboratory for analysis. After the farmer harvests the field, the enumerator makes a final visit to glean a small section to help indicate harvesting loss and arrive at a net yield estimate.

Personal Contacts

Interviews, to collect data, are conducted in person and by telephone by part-time enumerators who are employed under a contract with the National Association of State Departments of Agriculture. When making contacts, enumerators identify themselves as working for the Kansas Crop and Livestock Reporting Service. Each enumerator carries an ID card. Telephone enumerators in Topeka are supervised by Ruth Robker. Field enumerators are supervised by five area supervisors as indicated in the map.

Area supervisors have extensive experience in data collection activities and do an excellent job of working with and training their staffs of enumerators. Any

T. Warren Hall	Verna L. Kern	D. Jean Black
Ellis	Lyons	Ottawa
(913) 726-4840	(316) 257-2627	(913) 242-3655


CHEYENNE
RAWLINS
DECATUR
NORTON
PHILLIPS
SMITH
JEWELL
REPUBLIC
WASHINGTON
MARSHALL
NEMAHA
BROWN
DONIPHAN
SHERMAN
THOMAS
SHERIDAN
GRAHAM
ROOKS
OSBORN
MITCHELL
CLOUD
CLAY
RILEY
POTTAWATOMIE
JACKSON
ATCHISON
WALLACE
LOGAN
GOVE
TREGO
ELLIS
RUSSELL
LINCOLN
OTTAWA
SHAWNEE
JEFFERSON
LEAVENWORTH
WYAN
GEARY
DICKINSON
SALINE
ELLSWORTH
MORRIS
WABAUNSEE
OSAGE
DOUGLAS
JOHNSON
GREELEY
WICHITA
SCOTT
LANE
NESS
RUSH
BARTON
RICE
McPHERSON
MARION
CHASE
LYON
FRANKLIN
MIAMI
COFFEY
LINN
PAWNEE
STAFFORD
FINNEY
HARVEY
BUTLER
GRAY
FORD
EDWARDS
PRATT
SEDGWICK
GREENWOOD
ALLEN
STANTON
GRANT
HASKELL
KIOWA
KINGMAN
ELK
MEADE
CLARK
COMANCHE
BARBER
HARPER
SUMNER
COWLEY
MORTON
STEVENS
SEWARD

Emma Lauris Issinghoff	Shirley J. Burhenn
Spearville	El Dorado
(316) 385-2550	(316) 321-5867

questions regarding contacts made by the enumerator staff may be directed to the supervisors or directly to the office in Topeka. The phone number is (913) 295-2600.

The Satellite's Future Role

Research now is being performed on the utilization of NASA earth resources monitoring satellites, LANDSAT II and III, to make crop acreage estimates. The satellite approach shows promise for improving county and state data with no increase in the burden on respondents associated with ground surveys. Major problems with the satellite program include cloud cover, which results in incomplete and modified signals; delays in delivery of LANDSAT data in time for analysis and incorporation into regular reports; and relatively high costs of data gathering, validation, processing and analysis.

The Kansas Crop and Livestock Reporting Service, however, plans to use the satellite's information along with current survey methods for estimates of the Kansas wheat crop. A favorable experience could lead to more extensive use of satellites for future estimating programs and to gather data on land use for other agencies.

Data for Decision-Making

Agricultural data, such as that supplied by the Kansas Crop and Livestock Reporting Service, provide the basic framework for decision-making throughout the agricultural economy. In the absence of good data, decision-making is compounded. Each "player" in the marketplace, taking on a high risk, must be protected by seeking higher profit margins—something which usually results in a reduction in the prices received by farmers.

The January 1980 embargo on grain sales to the U.S.S.R. provided an excellent example of confusion in the marketplace. The resulting uncertainties in supply and demand brought futures and cash markets to a standstill for a few days, with substantial price reductions when markets resumed. In subsequent months, marketplace participants, including grain dealers, farmers, farm organizations and politicians, struggled to evaluate the impact of the embargo while buyers and sellers struggled to minimize their losses stemming from the increased market uncertainties which resulted.

Kansas farmers striving to compete more effectively in the market are making extensive use of agricultural data. Individual farmers use local, national and worldwide supply and production data to plan their own production and marketing programs. Some get such data directly from the Crop and Livestock Reporting Service; others get it more indirectly through farm magazines and private market newsletters. Farm organizations make valuable use of agricultural data as they represent farmers before governmental legislative and regulatory bodies.

Foreign Projects

The agricultural data system in this country is envied around the world; people from many countries come here to observe the system and determine how they might improve their own data systems. The Kansas office has worked with statisticians from many nations. In July 1980 a team of three statisticians from the Philippines visited the office and worked with Kansas statisticians for nearly two weeks studying the survey methods employed in estimating crop and livestock production in the state. Later in the year, their team leader, John W. Kirkbride, retired chairman of the Crop Reporting Board, went to the Philippines to help them install improved procedures.

Reporters are Invaluable

No commentary on crop and livestock reports would be complete without a tribute to those who provide the basic inputs. Thousands of men and women in Kansas, associated with farming and agribusiness, are extremely faithful in providing the voluntary reports upon which the Kansas agricultural data system is based. Their loyal support should be appreciated by every Kansas citizen.

Governor John Carlin

Statisticians from the Philippines called on Governor Carlin during their visit to Kansas during the summer of 1980. Standing behind Governor Carlin, from left to right, are Moe Johnson, Kansas State Statistician; Winifredo Amandy; John W. Kirkbride, team leader; Consuelo Gomez; and David Besa.

GUY E. GIBSON
CHIEF ENGINEER

WATER RESOURCES DIVISION

At the beginning of 1980, 11 of the 21 major reservoirs in Kansas were below conservation pool level. December 31, 1980 water levels were below conservation storage in all major reservoirs in Kansas. Storage in Norton, Webster, Kirwin and Cedar Bluff reservoirs remained very low during the year with little or no water available for irrigation purposes.

Precipitation during 1980 was quite variable across the state with accumulated totals for Kansas as a whole about 6.5 inches below normal at the close of the year. Normal to above normal precipitation fell over most of the state during the first five months of the year; averages were about one inch above normal. Dry to very dry conditions existed throughout most of Kansas during June and continued that way, except for August, during the remainder of the year. As of December 31, 1980, precipitation was below normal in all nine climatological divisions. Extremes ranged from about one-tenth inch below normal in the west central division to approximately 14 inches below normal in the southeast division.

Table 1.—WATER STORAGE IN MAJOR RESERVOIRS

Reservoir	Irrigation or conservation storage capacity (acre-feet)	Water in storage (acre-feet)		
		December 31, 1979	June 30, 1980	December 31, 1980
Norton	35,940	5,710	6,202	3,314
Lovewell	41,690	36,020	44,408	31,874
Milford	415,350	399,610	448,350	373,267
Cedar Bluff	185,090	30,990	31,487	23,896
Kanopolis	55,240	50,550	66,763	54,712
Wilson	247,840	238,480	249,902	233,248
Webster	77,370	21,230	25,611	9,467
Kirwin	99,440	16,250	23,234	8,427
Waconda Lake	241,460	207,020	232,820	192,731
Tuttle Creek	425,310	397,180	456,791	352,491
Perry	243,220	231,800	240,119	220,521
Pomona	70,600	63,740	77,954	67,676
Melvern	154,370	136,320	156,160	140,691
Clinton	129,400	76,430	125,690	124,364
Cheney	167,100	172,260	165,173	147,908
Toronto	23,300	22,840	20,070	12,210
Fall River	23,900	24,340	21,990	14,020
Elk City	34,600	35,640	48,240	34,210
Council Grove	38,300	37,230	49,260	31,660
Marion	86,660	87,640	82,640	68,300
John Redmond	82,120	82,870	84,190	67,580
El Dorado	157,000	0	—	256
Big Hill	25,700	0	—	—

Precipitation received in calendar year 1980 by county is shown on page 52.

Except for the spring and early summer months, streamflow generally was below normal through Kansas.

Groundwater Cooperative Program

Water table declines in western Kansas slowed during 1979, according to water level measurements taken in January and February 1980. An average decline of about one foot was indicated from measurements in approximately 1,250 wells. Average water levels dropped about two feet in 1978.

The slower decline in 1979 may be attributed to above average rainfall during the year which alleviated some of the need for groundwater pumpage, the primary cause of water level declines in western Kansas. Improved irrigation practices, increasing energy costs and a slower rate of groundwater development also may have slowed water level declines.

Water level measurements from approximately 350 wells in south central Kansas show a rise of about .2 feet for 1979, compared with a decline of approximately one foot in 1978.

Rural Water District Grant Program

State grant funds totaling $592,049 were approved during 1980 to assist in the development of two rural water districts. The districts are Butler County No. 6 and Saline County No. 5. Approximately 455 benefit units will be served by these districts.

Since initiation of the rural water district grant program July 1, 1974, a total of $7 million was appropriated and committed to assist in the construction of 28 districts. More than 7,200 families and several small cities will receive benefits from the completed projects.

K.S.A. 82a-638, under which state grant funds were made available, expired January 1, 1981.

Interstate River Compacts

Kansas is a member state in four interstate river compacts: the Kansas-Oklahoma Arkansas River Compact, Kansas-Colorado Arkansas River Compact, Republican River Compact and the Kansas-Nebraska Big Blue River Compact.

The administration of each compact had an annual meeting to complete yearly business matters and formulate programs for the coming year. New construction storage in the Arkansas River Basin was prepared for the Kansas-Oklahoma Compact.

Special studies to evaluate needs for additional gauging stations and increasing channel capacity were completed under the Kansas-Colorado Compact. New studies initiated include storage limits of Trinidad Reservoir, transit losses of the Arkansas River and the effects that Pueblo Reservoir may have on flows of the river. Data obtained from the studies will provide more efficient distribution of surface water supplies.

Virgin water supplies and consumptive use were computed for the 1979 water year for the Republican River Compact Basin. A special study, in cooperation with the U.S. Geological Survey, to determine the effects of pumping of wells on flows of the Big and Little Blue Rivers was completed under the Kansas-Nebraska Big Blue Compact.

Annual reports were prepared and distributed for each of the compacts.

Water Appropriation

The number of applications filed for permit to appropriate water for beneficial use decreased to 1,124 compared to 1,211 in 1979. Table Two summarizes the number of applications received by source and use in 1980. Irrigation, with 817 applications, continued to be the dominant use. Groundwater continued to be the dominant source of water.

The decrease in the number of applications to appropriate water may be attributed to management programs of the various groundwater management

Table 2.—APPLICATIONS FOR PERMIT TO APPROPRIATE WATER

January 1, 1980 through December 31, 1980

Purpose of Use	Number of Applications Received		
	Surface Water	Ground Water	Total
Irrigation	96	721	817
Municipal	14	104	118
Industrial	11	83	94
Recreational	17	10	27
Domestic	6	1	7
Stockwater	5	55	60
Water Power	1	0	1
Total	150	974	1,124

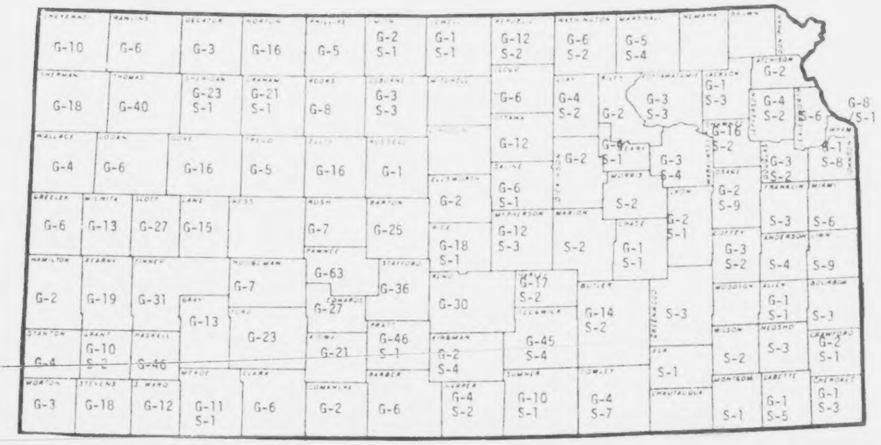
districts. Some people are contacting their groundwater management district before filing to see if they can meet management criteria. If they cannot, many do not file formal applications.

Much professional and clerical work goes into reviewing and processing applications. Applications for irrigation use on large blocks of land were reviewed, hearings conducted and orders issued either approving or denying individual applications. Applications for various municipalities and large industrial users also were processed. Many of these presented some real challenges.

Dry weather and heat during the summer months resulted in many requests to secure water. The field and office staff spent many hours making investigations

WATER APPROPRIATION APPLICATIONS

Number of Applications Received According to Counties
January 1, 1980 through December 31, 1980
Figure 2.—Source of Water Supply: G-Groundwater; S-Surface Water


G-10
G-6
G-3
G-16
G-5
G-2 S-1
G-1 S-1
G-12 S-2
G-6 S-2
G-5 S-4
G-18
G-40
G-23 S-1
G-21 S-1
G-8
G-3 S-3
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G-4 S-2
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S-3
G-4
G-10 S-2
G-46
G-23
G-21
G-46 S-1
G-2 S-4
G-45 S-4
S-1
S-2
S-3
G-2 S-1
G-3
G-18
G-12
G-11 S-1
G-6
G-2
G-6
G-4 S-2
G-10 S-1
G-4 S-7
S-1
G-1 S-5
G-1 S-3

WESTERN KANSAS TOTALS	CENTRAL KANSAS TOTALS	EASTERN KANSAS TOTALS
G-434	G-445	G-95
S-5	S-26	S-119

and field determinations of water availability and enforcing surface and ground water rights.

The distribution by counties of applications for permit to appropriate water for beneficial use filed during 1980 is shown in Figure Two. Forty-two percent of all applications were filed in the central third of the state, followed closely by 39 percent in the western third.

The provisions of the Water Appropriation Act for granting temporary permits to appropriate water for beneficial use became effective January 1, 1978. Many temporary permits were issued during 1980; more than double the number issued in 1979.

The Water Appropriation Act, as revised, required that all persons claiming a vested right for the beneficial use of water, other than for domestic use, which has not been determined pursuant to K.S.A. 82a-704 shall file by July 1, 1980, a verified claim with the chief engineer for such vested right. By July 1, 1980, 38 claims were submitted. Third-seven hearings, as required by statute, subsequently were conducted. No orders determining and establishing vested rights have yet been issued for these claims. Many of the hearings were continued into 1981 so additional information could be obtained.

The development of the program to automate the water record system is being continued by the state division of computer services and the division of water resources. Water right data now is being entered into the computer data system. Unforeseen problems have caused delays in entering the data. As a result, the estimated completion date for data entry has been set back.

A moratorium on new appropriations continues in parts of Kearny and Hamilton counties along the Arkansas River. A study is being conducted by the U.S. Geological Survey; a preliminary draft of the report covering the area from the Colorado border to the Bear Creek Fault has been furnished for review. The disposition of applications for permit to appropriate water filed after the effective date, January 21, 1977, is pending the results of the study.

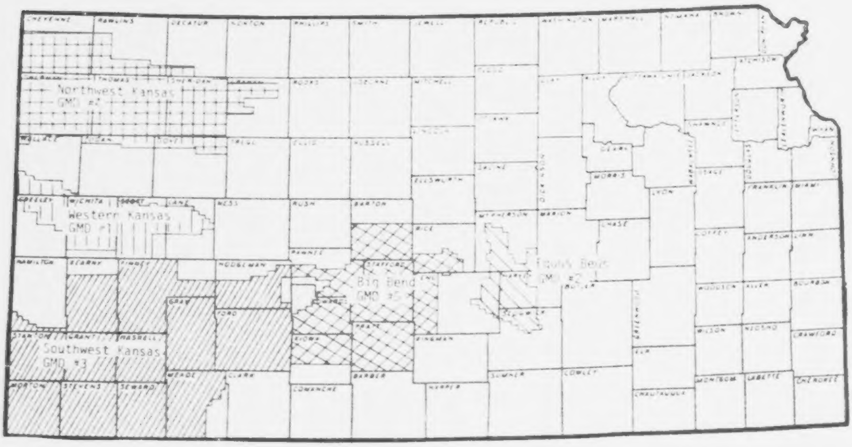
On January 31, 1980, an order was issued by the chief engineer and director of the division approving an application by Public Wholesale Water Supply District No. 1 for permit to appropriate water for municipal use in several rural water districts and three small communities in Johnson County. This order was issued following a hearing in Topeka September 24, 1979, and has been appealed in district court by the City of Olathe.

A March 28 order was issued requiring the installation of water meters on surface water pumping installations on a reach of the Solomon River below Glen Elder Dam to facilitate administration of water rights along the river and account for water sold under the Warren Act.

Water Planning Valuable

Kansas Secretary of Agriculture W. W. Duitsman, appearing before the Senate Energy and Natural Resources Committee and the House Governmental Organization Committee, said "Ride a plane over the eastern half of Kansas and try to count the stock water ponds—they abound everywhere. Take a look at a map and see the many watershed districts for flood control and water storage which provide protection and a source of the precious resource, water. Count the rural water districts that provide water for more than a tenth of the state's population. Note the number of large dams for flood protection and water supply for many of our rural and urban citizens. Take a look at our grasslands under grazing programs of management for maximum grass production and preservation of water. Study well the efforts for quality water and the work on planning for the future. Be informed of the research on crops that utilize less water and the new approaches to irrigation of crops. Recognize the intensive study and management within the organized groundwater districts, irrigation districts . . ."

Figure 3. ORGANIZED GROUNDWATER MANAGEMENT DISTRICTS IN KANSAS



Groundwater Management Districts

The Groundwater Management District Act became effective July 1, 1972. Since then, five groundwater management districts have been organized, the first in 1973, the fifth in 1976. The locations and the areal extents of the districts are shown in Figure Three.

The Northwest Kansas Groundwater Management District No. 4 adopted a revised management program Feb. 19. It included a planned depletion criteria to be used in evaluating new appropriation applications.

An order was issued March 28 establishing an intensive groundwater use control area in the vicinity of McPherson. The area was established after Equus Beds Groundwater Management District No. 2 recommended initiation of proceedings to establish such an area and a hearing was conducted in McPherson Sept. 18, 1979. Generally, the order provides that no further appropriations will be allowed, with a few exceptions including domestic use, and that water use be metered and water levels monitored. A hearing in Larned Nov. 25 dealt with the establishment of an intensive groundwater use control area in the Pawnee River Moratorium Area. The hearing was continued so Big Bend Groundwater Management District No. 5 could furnish additional information.

Water Use Program

As part of a cooperative agreement with the U.S. Geological Survey, funds are provided for collection of water use data. These funds are used to conduct field inspections which provide data to determine the extent to which a water right is perfected. It constitutes an audit of the water rights. One hydrologist has been hired under this federally funded program to assist in checking and issuance of certificates of appropriation of water for beneficial use.

The division of water resources furnishes the U.S. Geological Survey with copies of completed field inspection reports and water use reports.

Two contracts were awarded to consulting engineers for the 1980 irrigation season to conduct audits and complete field inspection reports, primarily in the north central and south central parts of the state. The work was performed in a satisfactory manner. This procedure will be continued in 1981.

State Water Plan Storage Act (Water Reservation Right)

The Kansas Water Resources Board has filed notices in the past for water reservation rights to divert and store water of all streams flowing into the conservation storage water supply capacity of Council Grove, Marion, Elk City, Perry, John Redmond, Milford, Big Hill, Clinton, Onaga, Hillsdale, Kanopolis and Melvern reservoirs. During 1980, notices for water reservation rights, as amended, were reviewed and accepted for Marion and Hillsdale reservoirs. Notices previously had been accepted for John Redmond and Clinton reservoirs. These four reservoirs are the only ones to date for which the Kansas Water Resources Board has contracted or is completing contracts for sale of water from conservation storage space. The board has advised that the accepted amended notices for these four reservoirs have been filed in the office of the register of deeds in the counties where the points of diversion for the reservoirs are located.

Flood Plain Zoning and National Flood Insurance Program

The state water plan has an objective to reduce flood damages. Flood plain zoning is a technique incorporated into the Kansas flood plain management program to assist in that accomplishment. That program involves the engineering approval of any ordinance, resolution or regulation relating to a flood plain. Although seven such actions were approved during the year, most of the 30 actions in review are flood plain codes applied to buildings or earthfills rather than flood plain zoning. Either type of flood plain regulation meets the minimum standards of the National Flood Insurance Program, which the division of water resources has been designated to coordinate. Since both state and federal minimum standards are similar, they aim at the same flood damage reduction goal.

During 1980, three cities and two counties (unincorporated area) established initial flood insurance eligibility making a total of 295 participating communities. That means five out of six Kansans have access to insurance against flood hazard for buildings. Limited amounts of subsidized flood insurance are available to property owners. In 105 of those communities, additional flood insurance is available at true risk rates. Flood insurance is strictly federal insurance, although individual purchases can be made through any state-licensed property and casualty agent. At the end of 1980, Kansans had 6,812 policies with $210.5 million in financial protection against future flood damage.

Problems with the flood insurance program surfaced during the June 1979 flood which exceeded the "once-in-100-year" flood in parts of El Dorado. Despite seven years of availability of subsidized flood insurance and nearly three years of true risk flood insurance, under-insurance and lack of insurance were common.

Division personnel continue to participate in the joint development of implementing procedures under the memorandum of understanding between Kansas and Missouri concerning the flood plain of the Missouri River.

Dams, Levees and Other Projects

Permits were issued and plans approved for 54 farm pond and detention dams, 27 watershed district dams, 2 industrial water supply dams, 9 recreational dams, 2 overflow dams, 3 changes in existing dams, 114 channel change projects and 9 jetty projects. Plans for 12 new levee projects were approved. A permit was issued and the plans approved for one levee repair project.

A permit was issued and plans approved for one new sand plant. Extensions of time were granted to 18 sand companies, authorizing them to continue operations for an additional year.

Field inspections were made to determine the adequacy of sites, construction procedures and satisfactory completion of various projects; 24 such inspections were made of farm pond and detention dams, 151 of watershed district dams, 15 of industrial water supply dams, 21 of recreational dams, 14 of channel change projects, 10 of new levee projects, 3 of new sand plant sites, and 18 of existing sand plant sites in response to requests for extensions of time on previously issued permits.

Eighty-nine certificates of satisfactory completion and reservoir capacity were issued to authorize reductions in assessed valuation of properties in connection with watershed district dams; 32 such certificates were issued in connection with individual dams.

Watershed district activity included the approval of Modified General plans for Rock Creek Watershed Joint District No. 84 and Allen Creek Watershed Joint District No. 89. A hearing was conducted on a petition to dissolve a portion of the Middle Creek Watershed Joint District No. 50; the chief engineer's order relative to this matter still is pending.

The 84 legally organized watershed districts in the state include 11,241,626 acres; 14 other districts covering 2,096,000 acres are in a proposed status. The total of the organized and proposed districts is approximately one-fourth of the area of the entire state. General plans showing works proposed to be undertaken have been approved for 69 of the organized districts. They contemplate construction of 3,100 floodwater retarding dams. Fifteen districts have completed construction of all works contemplated in their general plans, which include 284 floodwater retarding dams. In addition, three pilot watershed projects have completed 13 floodwater retarding dams and have organized as watershed districts to maintain those structures. Forty-five other districts have undertaken some construction work; they have completed 474 floodwater retarding dams and have 10 more under construction. Proposed in those 45 districts are an additional 2,689.

National Dam Inspection Program

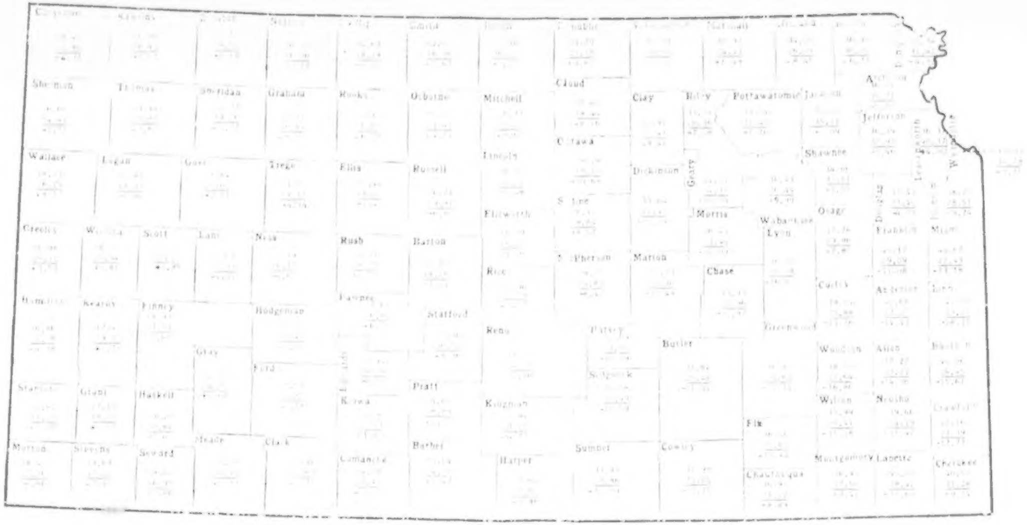
The contract with the U. S. Corps of Engineers for updating the inventory on non-federal dams in Kansas was completed. In existance at the end of fiscal year 1980 were 5,004 non-federal dams and 27 federal dams which met the size and storage criteria. Dams included in the inventory are those which are 25 feet in height with a storage capacity of 15 acre-feet or more, and those with a capacity of 20 acre-feet or more with a height in excess of six feet. Approximately 135 of the non-federal dams in the state are classified "high hazard" and are being inspected under this program.

The inventory classified the dams on the basis of their potential for causing loss of life or property damage if they failed. Dams in the "high hazard" potential category are located where failure can cause loss of life and extensive property damage. The classification is based on location rather than structural soundness.

The other phase of this program being performed under contract with the U.S. Corps of Engineers is the inspection of all dams in the "high hazard" category. Through December 1980, 110 dams were inspected and Final Phase I Inspection Reports completed. Forty such reports were completed during 1980.

Inspections reported deficiencies in several dams; remedial actions have been or are being made by several owners. Two reservoirs are maintaining lower water levels, two have been drained and are undergoing repairs, corrective maintenance has been completed on four and engineering studies and corrective actions are being completed on several others. Dam owners who have not informed the division of contemplated action are being notified of their responsibilities. Orders have been issued in cases where necessary for protection of life and property.

KANSAS PRECIPITATION BY COUNTY


Sherman
Thomas
Sheridan
Graham
Rooks
Osborne
Mitchell
Cloud
Clay
Riley
Pottawatomie
Jackson
Jefferson
Atchison
Wallace
Logan
Gove
Trego
Ellis
Russell
Lincoln
Ottawa
Dickinson
Geary
Shawnee
Greeley
Wichita
Scott
Lane
Ness
Rush
Barton
Ellsworth
Saline
Morris
Wabaunsee
Osage
Franklin
Miami
Rice
McPherson
Marion
Chase
Lyon
Coffey
Anderson
Linn
Hamilton
Kearny
Finney
Hodgeman
Pawnee
Stafford
Reno
Harvey
Butler
Greenwood
Woodson
Allen
Bourbon
Gray
Ford
Sedgwick
Stanton
Grant
Haskell
Kiowa
Pratt
Kingman
Elk
Wilson
Neosho
Crawford
Morton
Stevens
Seward
Meade
Clark
Comanche
Barber
Harper
Sumner
Cowley
Chautauqua
Montgomery
Labette
Cherokee

Upper figure in each county is the 1941-70 normal precipitation for reporting station. Middle figure in each county is the 1980 precipitation for reporting station. Lower figure represents the difference. Precipitation during 1980 was quite variable across the state and accumulated totals for Kansas as a whole were about 6.5 inches below normal.

FREEMAN E. BIERY
DIRECTOR

PESTICIDE S AGE
KEEP THIS DOOR LOCKED

WEED AND PESTICIDE DIVISION

The year 1980 was challenging for the staff of the pesticide records center in the weed and pesticide division. Pesticide applicator certificates authorize individuals to apply restricted use pesticides. All such certificates which were issued during the first year of the Kansas Pesticide Law were scheduled to expire Dec. 31, 1980 and were subject to renewal during the year. The pesticide records center devoted major efforts to advance preparation for the work involved in the recertification and then to the processing of forms and fees and the issuance of renewal certificates.

In preparation for the year's heavy workload, plans were made to computerize records. The staff of the center worked with Kansas State University's computing facilities to complete the input of data on approximately 26,000 private applicators and more than 3,000 commercial applicators. This, plus other aspects of the new system's implementation, resulted in computer-generated renewal certificates and pocket cards for private applicators.

A high volume of recertification work was received in the center during the last quarter of the year. Thousand of applications, about 10,000 records of recertifi-

cation training attendance, and private recertification training records from county extension agents were received in the office. They also worked with attendance records from the six commercial recertification training sessions conducted by Kansas State University Extension in October and November.

At the same time, personnel in the center continued to perform the high volume of work associated with issuing documents to and maintaining records on pesticide applicator business licensees and registered government agencies.

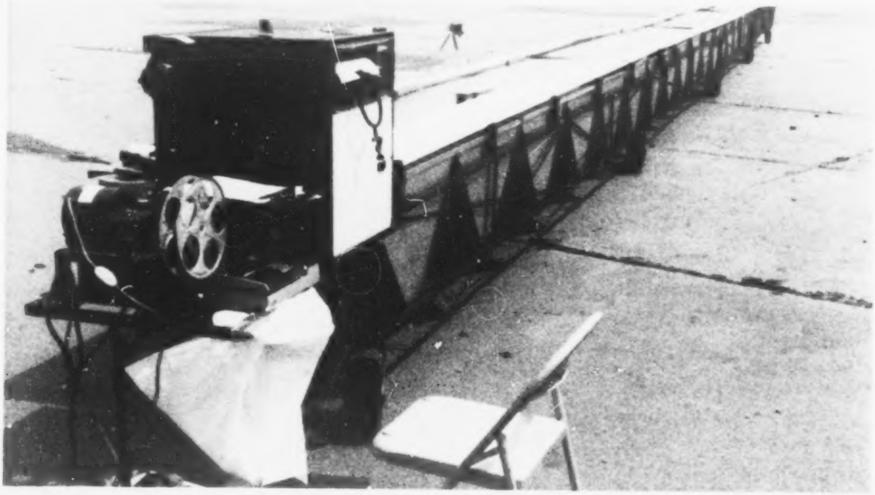
Work by a number of temporary employees supplemented the efforts of the center's permanent staff during this peak workload period.

Betty Johnson, pesticides record center employee, enters data for computer-generated renewal certificates and pocket cards for private applicators.

Sharon Henson maintained record keeping and supervised temporary employees during the peak workload period in the pesticide record center.

Spray Testing System Developed

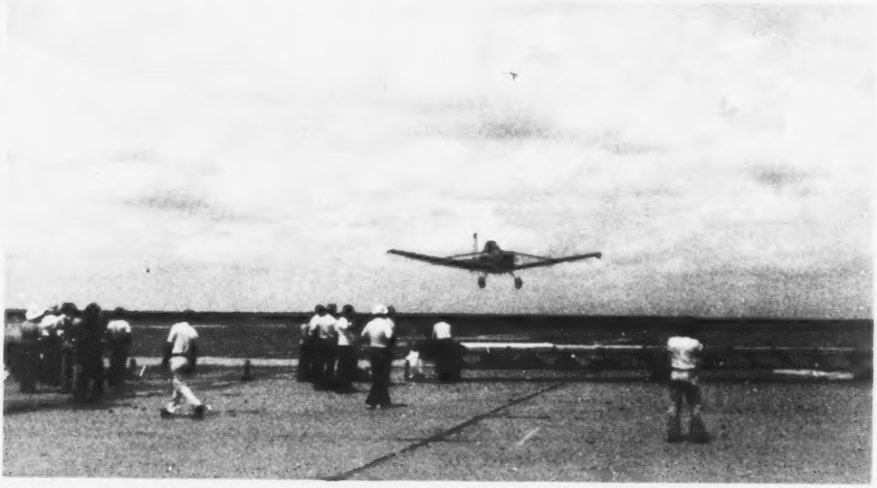
The weed and pesticide division constantly strives to establish and maintain good relationships between pesticide applicators and the public. The safe and proper use of pesticides is one of the division's primary objectives. It is unfortunate, however, that relatively few innovative tools are available to accomplish this task.



Agricultural engineers at Oklahoma State University recently have developed a system for checking the spray distribution patterns of agricultural aircraft. It consists of a portable sampling device which is 80 feet long. It is capable of recording the distribution pattern of either dry or liquid applications.

A number of variables, such as the orientation of the spray equipment, aircraft design and weather factors, combine to make each individual aircraft produce its own unique spray pattern. The use of the new sampling device helps applicators determine the particular spray distribution pattern of their individual airplanes for optimum application.

The device has been made available to Kansas aerial applicators at "fly-ins" sponsored by the Kansas Cooperative Extension Service. Any aerial applicator interested in checking the distribution pattern of his or her aircraft may participate.



When the device is set up, an applicator flies over a sampling platform at normal spraying height and speed. A spray consisting of water and dye is deposited on the platform. The dye records the droplet pattern on a paper strip which is fed into a printer called a fluorometer. A graphic printout of the spray pattern is produced. Technicians interpret the printout and make necessary adjustments in nozzle sizes and spacing along the spray boom. Additional passes and adjustments are made until the data indicates the best possible spray distribution pattern has been achieved.

When the applicator is aware of the distribution pattern and swath width the aircraft produces, he or she can concentrate on other variables which provide the applicator more time to observe and protect "sensitive" areas at or near the application sites. Since complaints investigated under the Kansas Pesticide Law usually relate to those sensitive areas, the program provides a way to reduce complaints about applicators of pesticides. It also allows the weed and pesticide staff to concentrate on other important areas of concern to agriculture in this agricultural state.

This aggressive growth of kudzu is on a shale mine spoil in Cherokee County.

Kudzu Lives in Kansas

Kudzu, a menacing noxious weed in the south, has been found to have its roots planted in Kansas soil. During 1980, Secretary of Agriculture Duitsman observed the devastation caused by this aggressive, high-growing vine in the southern states and Arkansas. He expressed concern about its possible encroachment into Kansas.

The plant grows new from the root each year. It is capable of quickly engulfing a large tree and actually smothering it.

Kudzu seed produced in Japan first was introduced to the United States in an effort to control erosion in the southeast. Early plantings in Kansas were made for the same reason.

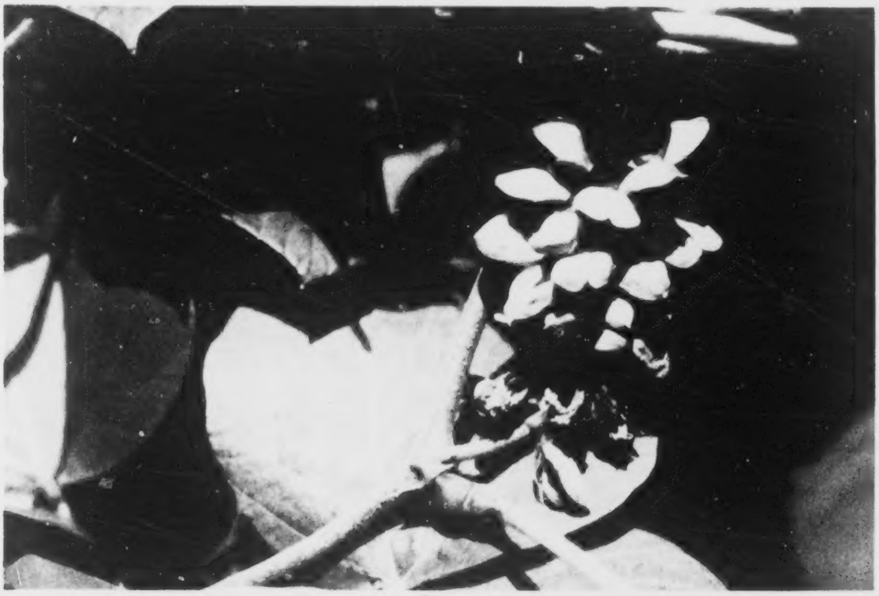
The information which was available early in 1980 indicated there were only three colonies of the plant. It was thought that it could not flower and produce seed in Kansas weather conditions. In 1980, however, it did flower and produce seed.

Concerned, the staff of the noxious weed area of the weed and pesticide division conducted a thorough study of kudzu in Kansas. They discovered there were actually eight colonies in the state, three in Cherokee County, two in Doniphan, and one each in Montgomery, Atchison and Riley counties. Another colony was reported in Brown County, but has not been verified. The total area of the eight colonies is approximately 15 acres.

A demonstration plot was established in Doniphan County in September to determine which of the five approved herbicides would be most effective to control and eradicate kudzu in Kansas. Herbicides used were krenite, glyphosate, amitrole, picloram and dicamba. Another demonstration plot is planned to gather further information.

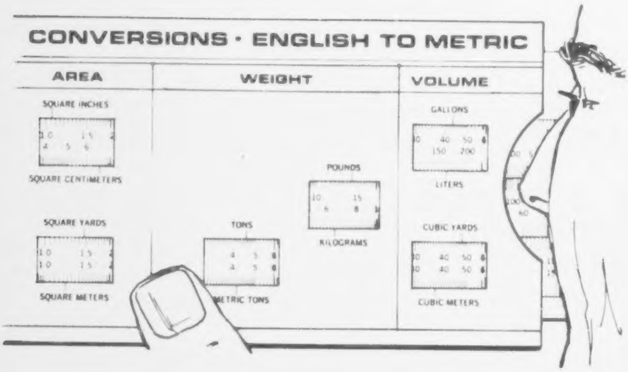
The seed laboratory of the Kansas State Board of agriculture tested germination of seed collected in Cherokee County. Their report showed four percent viability, even though the seed pods were not completely mature.

The division plans to continue monitoring and testing of the plant to prevent the encroachment of another noxious weed damaging to Kansas agriculture.



Shown is a flowering kudzu plant east of Troy in Doniphan County. It was once erroneously thought the plant could not flower and produce seed in Kansas.

Bill Scott is pictured applying herbicides on a controlled demonstration site in Doniphan County.


CONVERSIONS · ENGLISH TO METRIC
AREA
WEIGHT
VOLUME
SQUARE INCHES
SQUARE CENTIMETERS
SQUARE YARDS
SQUARE METERS
POUNDS
KILOGRAMS
TONS
METRIC TONS
GALLONS
LITERS
CUBIC YARDS
CUBIC METERS

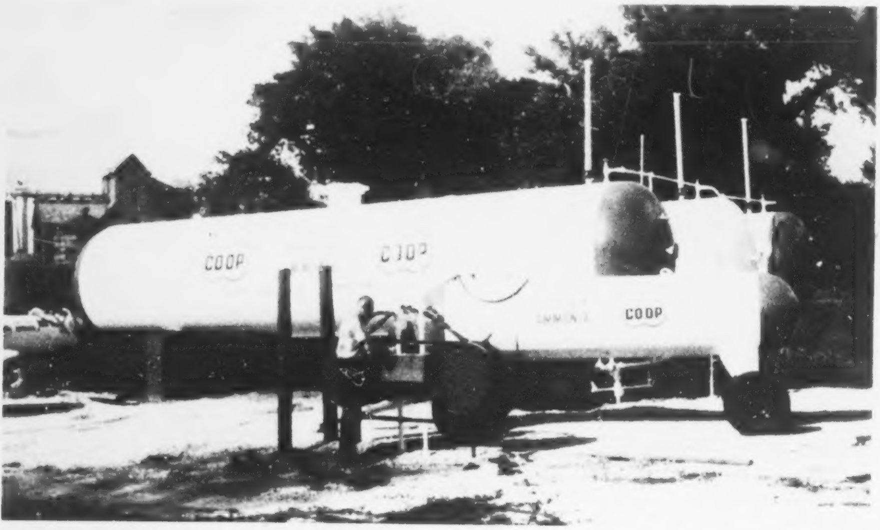
JOHN O'NEILL
STATE SEALER

WEIGHTS AND MEASURES DIVISION

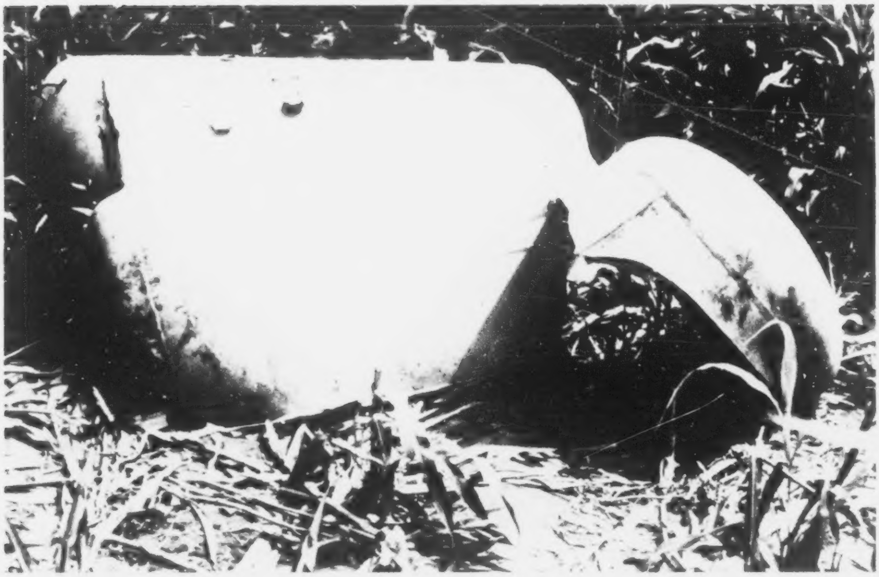
In the last crop reporting year, more than 485,000 tons of anhydrous ammonia were used on Kansas farms. This fertilizer was produced in about 800 plants across Kansas.

Safety is a vital consideration in the handling of anhydrous ammonia. The weights and measures division of the Kansas State Board of Agriculture is charged with enforcing safety regulations on transportation and handling of this hazardous material which is a necessary fertilizer for Kansas farms.

Some pressure is being exerted to move existing anhydrous ammonia plants away from populations. Keeping the product available for use on Kansas farms will depend on the safety practices of users and handlers at retail establishments.


COOP
COOP
COOP

Pictured is one of the 800 anhydrous ammonia plant sites in Kansas. They are safety-checked by the weights and measures division at least once each year.

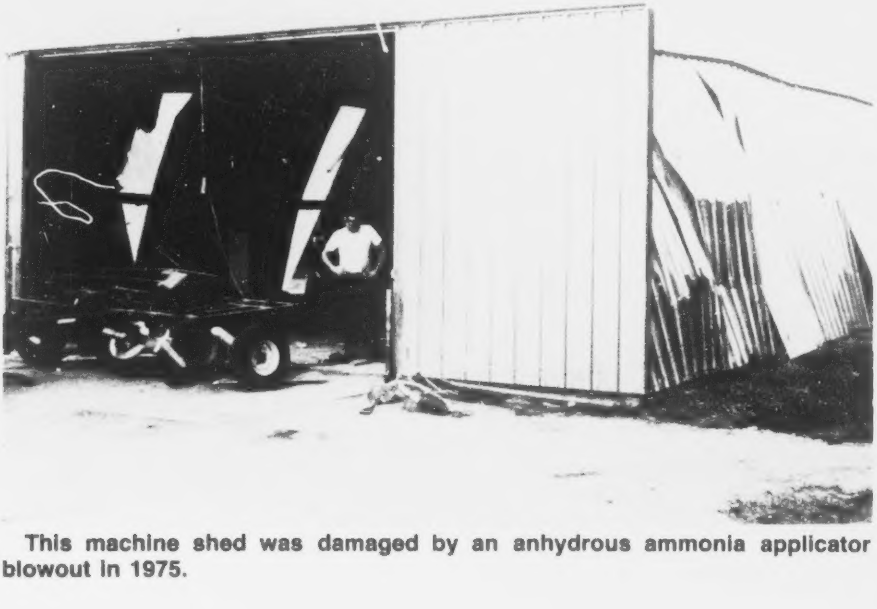


Pictured are the remains of an overfilled applicator tank which burst open and killed four people in 1975.

Accidents Cause Concern

There were five fatalities in an anhydrous ammonia accident in the summer of 1975. Since that time, criticism has been leveled at the fertilizer by many Kansas cities and federal safety regulations. Some counties are considering zoning against anhydrous ammonia plants.

Indications are that plants must be operated safely or actions will be taken to make the product less readily available for farm users. A spill and fatal accident which occurred in July 1980 caused a facility in Stafford County, the Seward plant which was involved, to close.



This machine shed was damaged by an anhydrous ammonia applicator blowout in 1975.

Safety Regulations

Farm users always should subscribe to the following safety regulations which have been in the Kansas books since 1969.

° Equipment must be in good shape; painted, with new hoses, proper safety valves, and information attached to applicators and nurse tanks listing safety measures in case of accident.

° Water containers, with a fresh supply of water, must be attached and available on all field equipment.

° Gloves and goggles must be available and used to transfer liquid ammonia.

° All nurse tanks and applicators must be no more than 85 percent full.

° Devices in the field must have break-away hoses; safety chains and lock hitch pins must be used for on-the-road travel and field use.

° No more than one nurse tank can be pulled on roads and highways, with the proper equipment to handle an 8,000 pound vehicle at a safe and reasonable speed. No full applicator tanks should be pulled on the road. Applicator tanks must be filled in an open field, not at storage areas in cities. They must be filled from nurse tanks only.

° If an area of the body receives a blast of ammonia, it should be liberally flushed with water before going to the doctor. He or she should be informed that it is an ammonia burn to which salves and greases must not be applied.

Long-time users of the product who never have had an accident are lucky. Accidents often occur when users take their luck for granted and handle the product carelessly. The results often are blindness or death. If users and handlers do not follow safety rules scrupulously, this important fertilizer may no longer be available for use in Kansas.

Anhydrous Ammonia, a Volatile Substance

Anhydrous ammonia is a compound formed by a combination of two gaseous elements, nitrogen and hydrogen, in the proportion of one part nitrogen to three parts hydrogen by volume. It can take either a gaseous or a liquid form. Anhydrous ammonia should not be confused with aqua ammonia—a solution of ammonia gas in water.

Gaseous ammonia liquifies under pressure at ambient temperature. Industry takes advantage of this characteristic by usually shipping and storing the commodity under pressure as a liquid. When refrigerated at or below –28°F., its normal boiling point, it may be shipped and stored as a liquid at atmospheric pressure.

Ammonia should be handled only by properly trained personnel. It is never to be used in conjunction with other chemicals unless the possible reactions have been adequately investigated. Ammonia and ammonium compounds can form explosive products in combination with some other chemicals. For additional information, refer to NFPA 49IM "Manual on Hazardous Chemical Reactions" and C-G-388, the "Chemical Data Guide for Bulk Shipment by Water" (1969 Edition).

First Aid

After severe exposure to ammonia gas, it is important to move the patient from the contaminated area promptly. In case of contact between the liquid and eyes or skin, immediate flushing with large quantities of running water is imperative. In all cases of severe injury, a physician should be called at once and given a complete account of the accident.

Contact With Skin and Mucous Membranes

When an accident occurs, speed in removing ammonia from contact with the patient and moving him or her to an uncontaminated atmosphere are of primary importance. Whenever ammonia contacts the skin, the contaminated skin must be

These safety instructions and five gallons of fresh water are required on all vehicles of husbandry.

flushed immediately with large quantities of water. In case of extensive contact, the employee should enter the safety water tank or the emergency shower immediately. Flushing with water must continue for at least 15 minutes. Forcible removal of frozen clothing may tear the skin badly. Proper thawing is a must.

Salves or ointments must not be applied to skin or mucous membranes during the 24-hour period following the injury. Subsequent medical treatment is otherwise the same as for chemical burns.

Contact with the Eyes

If even a small quantity of ammonia enters the eyes, they should immediately be copiously irrigated with water for at least 15 minutes, holding the eyelids apart to ensure water contacts all the tissues of the eye surfaces and lids. A physician should be called as soon as possible. If a physician is not available, the irrigation should continue for another 15-minute period. A physician, preferably an eye specialist, should be consulted as soon as possible.

Taken Internally

If liquid anhydrous ammonia is swallowed, call a physician immediately. If the patient is conscious and able, he or she should drink large amounts of water to dilute the chemical. Vomiting should not be induced if the patient is in shock, unconscious, or in extreme pain. If vomiting begins, place the patient face-down with the head lower than the hips to prevent liquid from entering the lungs and causing further injury.

Inhalation

Exposed persons should be taken at once to an uncontaminated area. If the exposure has been limited to a minor concentration for a short period of time, no treatment usually will be necessary.

If a person has had severe exposure to higher concentrations, oxygen can be administered only by a person authorized by a physician. If the patient is not breathing, an effective means of artificial respiration should be initiated immediately; a physician must be called. Keep the patient comfortably warm, but not too hot, and resting. Never give anything by mouth to an unconscious patient.

In Memoriam

James A. Baker, 34, a staff member at Staats Ranch in Sedan, died Sept. 6 in a plane crash. He and another man were fatally injured when the private airplane failed while they were inspecting cattle from the air. A native of Kansas City, Mr. Baker is survived by a son, his parents and a brother.

Carroll Barr, 86, died July 18. A former president of the Shawnee County Farm Bureau, he had farmed in the Valencia community west of Topeka since 1949. He had been a member of the advisory board of the Shawnee County Farmers Home Administration. He is survived by his wife, Jane Shehi Barr; five sons; two daughters; one sister; twenty-six grandchildren; and fourteen great-grandchildren.

LaVere Brockman, 81, Onaga, died Sept. 18. A retired farmer and stockman who lived all his life in the Goff and Corning communities, he had been a Pioneer seed salesman. He also had worked for the ASCS office at Seneca. He is survived by his wife, Esther Quinn Brockman; a daughter; a son; a half sister; one grandson; and four stepgrandchildren.

Frances E. Charles, 80, died Oct. 27. A former Topekan, he had B.S. and M.S. degrees from Kansas State University, where he taught journalism for nine years. He had worked for the USDA's Soil Conservation Service and was editor of the John Deere Company magazine. He is survived by his wife, Ruth Swenson Charles; two daughters; and six grandchildren.

Lewis R. "Jack" Chase, 81, a Council Grove stockman and rancher, died May 17. He is survived by a son, a sister, two grandchildren, and two great-grandchildren.

Richard T. Cotton, 87, died March 11 in Topeka. An authority on the control of insects in stored grain, he was chief of the Federal Stored Grain Laboratory at Manhattan for many years. He had received the Department of Agriculture's Distinguished Service Award. He is survived by his wife, Emily Willey Cotton; a son; a brother; and four grandchildren.

John Cranor Jr., Hutchinson, died July 8. He was executive vice president of the Kansas Grain and Feed Dealer's Association, past president of the Agriculture Advisory Council of Kansas State University and the American Society of Association Executives. He was a graduate of the University of Kansas. He is survived by his wife, Cozette Wieland Cranor; two sons; a daughter; and two sisters.

Edith Darby, the wife of former U.S. Senator Harry Darby, died Aug. 26. She was 86. Mrs. Darby originated Kansas Day at the American Royal; for many years she was hostess at the event. She was a graduate of the University of Kansas. She is survived by her husband, four daughters, a sister, sixteen grandchildren and eleven great-grandchildren.

George Deewall, 76, died June 8 at Coldwater. A Hereford producer, he was a member of the Kansas Farm Bureau and the American, Kansas and Barber-Commanche Hereford Associations. He is survived by his wife, Mildred Long Deewall; one daughter; two sisters; four grandchildren; and eight great-grandchildren.

Vester Essary, 65, died in July. A retired agricultural inspector with the Kansas State Board of Agriculture, Essary was a poultry marketing specialist. In 1976 he was cited by the national FFA for his work with FFA poultry and egg judging contests on the state and national levels.

Dr. Edward R. Frank, 88, Manhattan, died Oct. 29. He was a retired professor of veterinary medicine at Kansas State University. He was an authority on large animal surgery. He is survived by his wife, Jean Dobbs Frank; two sons; and five grandchildren.

Harold Giess, Angus breeder from Arnold, died in June. He was the father of Bob Giess, former director of the American Angus Association.

W. Paul Hatcher, 82, died Aug. 27 in Emporia. He had ranched in Lyon and Chase counties and in Texas. He established the Emporia Livestock Sales Company and was a partner in the Peak and Hatcher Cattle Company. Mr. Hatcher is survived by his wife, Helen McCahan Hatcher; one daughter; one son; one sister; and eight grandchildren.

Dr. C. Harold Howe, 79, died Dec. 17 in Manhattan. He was a graduate of Kansas State University and a member of the agricultural economics faculty there from 1925 to 1964. He also was a former mayor of Manhattan.

Lloyd E. Huggins, 71, Council Grove, died Nov. 14. He was a farmer, former Morris County weed supervisor and 4-H leader.

S. W. "Jack" Jackson, 86, died Aug. 18. He had operated a creamery in Salina, a dairy in Topeka, and was an employee of the Kansas State Board of Agriculture's dairy division from 1942 to 1953. He is survived by his wife, Ruth Wright Jackson; one son; two daughters; a stepdaughter; twelve grandchildren; and five great-grandchildren.

Robert M. Lay, 79, died April 28. A Kansas State University graduate, he was a respected teacher of vocational agriculture in Columbus for 23 years. He is survived by his wife, Florence; one son; two daughters; one brother; four grandchildren; and three great-grandchildren.

Majel M. MacMasters, emeritus professor of grain sciences at KSU, died May 2. She was 75. An internationally known cereal chemist, she had received USDA's Superior Service award in 1961.

Charles S. McGinness, 87, died Dec. 11 in Topeka. He was a Kansas State Representative from Montgomery County and a former mayor of Cherryvale.

Charles J. Martin Jr., 34-year-old co-owner and manager of Staats Ranch in Sedan, was killed Sept. 6 in the crash of a private plane. A native of Bartlesville, Okla., he is survived by his wife, Vicki Sturgeon Martin; his parents; a son; a daughter; and two brothers.

Henry J. Moeck, Effingham, died Oct. 22. He was 74. A native of Nortonville, Mr. Moeck farmed until he became ASCS office manager at Effingham. He held that position until 1941. He later was farm fieldman from the state ASCS office at Manhattan until retiring in 1966.

Glen C. Neill, 64, died April 2. He was a farmer and stockman who had lived in Pomona since 1962. Mr. Neill was chairman of the Franklin County ASCS for many years. He is survived by his wife, Doris Burkdoll Neill; a daughter; his mother; two sisters; two brothers; and three grandchildren.

Ralph D. Nichols, Ottawa, died July 20 at the age of 87. A graduate of Kansas State University, he was a retired farm manager for Farm Management Associates. He had worked for the USDA and had been on the staff of Kansas State University. He is survived by his wife, Olive Kittell Nichols; three sons, a brother; six grandchildren; two step-grandchildren; three great-grandchildren; and three step-great-grandchildren.

Louise M. Porter, a former state senator, died Aug. 25. She was 62. During her six years in the senate, she had served on senate agriculture and livestock committees. Mrs. Porter lived at Council Grove from 1945 to 1958, when she moved to the Miller Ranch in Lyon County. She is survived by her husband, Walter H. Porter; a daughter; a son; a sister; a brother; and three grandsons.

Robert J. "Robby" Robinson died May 2 in Manhattan. He was 64. An associate professor in the department of grain science and industry at Kansas State University, he received his Ph.D. in 1957. He had been a member of the Governor's Council on Aging. He is survived by two adopted sons.

William H. "Herb" Robinson, 86, died Aug. 26 in his hometown of Holton. He graduated from Kansas State Agricultural College, Manhattan, in 1916. He was an agricultural agent who had served in several Kansas communities before retiring. He is survived by his wife, Merle Beeman Robinson; a son; a sister, and five grandchildren.

J. A. "Andy" Schoen, a registered Hereford producer from Lenora, died June 11. He was 87. Mr. Schoen was active in church, civic and agricultural organizations. His portrait was placed in the Block and Bridle Gallery at Kansas State University; in 1967 he was the Record Stockman Magazine's Livestock Man of the Year. He is survived by his wife, Grace Bicknell Schoen; two sons; a daughter; eight grandchildren; and fourteen great-grandchildren.

Arnold H. Schwandt, 74, Blaine, died Oct. 15. He had served on Rock Creek watershed board, Sherman Township Board and the Pottawatomie County Farm Bureau board. He is survived by his wife, Lydia Abitz Schwandt; one daughter; three sons; one sister; one brother; and nine grandchildren.

John T. Schweitzer, 42, and his wife, **Alma McDyson Schweitzer,** 36, died in an airplane crash June 1. They had farmed near Morrill since 1966, when they moved from a farm south of Riley. Mr. Schweitzer was a past president of his county Farm Bureau, a member of the Brown County ASCS, Kansas Livestock Association, Farm Management Association and Flying Farmers of America. Mrs. Schweitzer was active in the Brown County Farm Bureau and was a 4-H Club Citizenship Leader. Along with individual family members, the Schweitzers are survived by two daughters and one son.

Roger C. Smith, 91, died May 21. He joined the faculty of Kansas State University in 1920 and headed the KSU department of entomology from 1943 to 1955, when he retired. After retiring, he established the first U.S. Agency for International Development technical assistance program between KSU and India. He is survived by one son and one brother.

Ollie H. Swenson, 81, Eskridge, died May 12. He lived all his life in Wabaunsee County's Rock Creek Community until retiring and moving to Eskridge in 1979. A retired farmer and stockman, he was a former Wabaunsee County Commissioner. He is survived by his wife, Ethel Dewey Swenson; two daughters; three sons; three sisters; and eleven grandchildren.

John J. Vanier, 83, died Feb. 20 in Salina. He was a prominent cattleman and past president of the American Hereford Association. Mr. Vanier owned and developed the C-K Ranch near Brookville. He was inducted into the Hereford Heritage Hall of Fame in 1978. He also was involved in flour and feed milling. Survivors include his wife, Lesta; two sons; and one daughter.

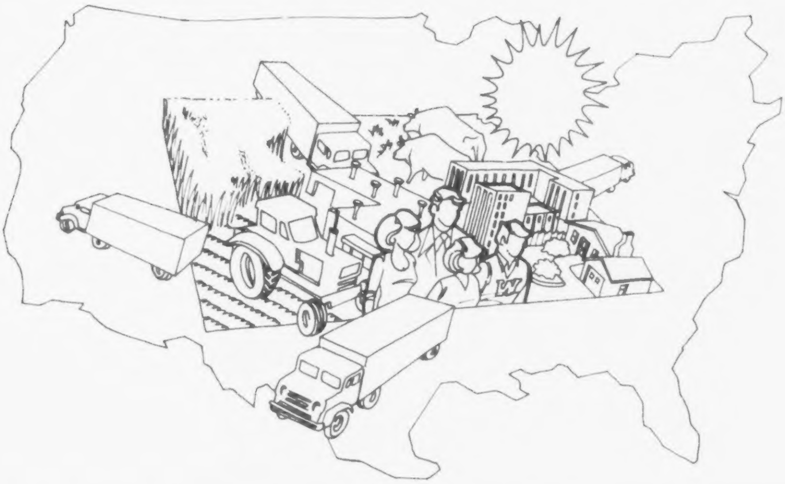
Jim Vestring, Burns, died March 22 at the age of 57. He had been active in agriculture in Butler, Chase and Marion counties, as well as several other states. He also was president of the Burns State Bank and the Augusta State Bank. Mr. Vestring was a Republican candidate for governor in 1978.

P. R. "Ted" Woodbury, a former mayor of Emporia, died Aug. 9. He was 78. A graduate of Kansas State University, he worked for the Kansas State Board of Agriculture as a dairy inspector from 1939 to 1943. He is survived by his wife, Marjorie Thomas Woodbury; two sons; one daughter; nine grandchildren; two brothers; and one sister.

George H. Works, a farmer from Humboldt, died Aug. 20 at the age of 64. He was in his fourth term as 10th District Representative in the Kansas House of Representatives and had been a 4-H leader about 30 years. Survivors include his wife, Jane Dodge Works; four sons; a daughter; two brothers and five grandchildren.

Sympathy also is extended to the families of these agriculturists who died during 1980: **Byron Kelly**, Salina; **Glen Merman**, Salina; **Mr. and Mrs. Dale Lightner**, Pierceville; **John Brink**, LeRoy; **Raymond "Short" Myers**, Bourbon County; **Ed Powell Jr.**, Hazelton; **Mark McClain**, Satanta; **John Wingrant**, Chanute; **J. D. "Jack" Ferrell**, Beaumont; **Ben Durea**, Cherryvale and **Pete Timi**, Arma.

AGRICULTURAL ISSUES: EXPORTS



AGRICULTURE—THE GLOBAL INCENTIVE

In the 18th Century, Kansas was just one small part of a mostly unexplored area some called the "Great American Desert." It barely was considered suitable for human, civilized habitation.

In the late 19th Century, the Kansas State Board of Agriculture was trying to paint a glowing picture of "Fertile Kansas" in an attempt to convince skeptical easterners that Kansas was no desert but rather a land with ideal climate and resources for successful farming.

Nobody said it was going to be easy. Those early settlers struggled to cultivate the virgin prairie, watched grasshoppers destroy entire crops, fought prairie fires, buffalo stampedes and the ceaseless wind. They would find it mighty hard to recognize Kansas agriculture today.

Some of the descendants of those farmers who once had to accept food aid from charitable easterners are farming Kansas land today. In the 20th Century, they not only produce sufficient food for their own families, but also feed millions of people across the globe.

1980 Exports from Kansas

During fiscal year 1980, Kansas became the fifth leading exporter of agricultural commodities among the fifty states. The total dollar value of Kansas agricultural exports was a record $2.2 billion, 41 percent above the $1.6 billion value of exports the previous year. Kansas had five percent of the national agricultural export total of $40.5 billion.

Kansas ranked first in export shares of wheat and wheat products. The $1.2 million in wheat exports was 56 percent of the total Kansas exports and 19 percent of the wheat exported by the U.S. The state ranked seventh in exports of feed grains and products totaling $520.7 million and accounting for five percent of the U.S. total. Meat and meat products, lard and tallow, and hides and skins also are important Kansas export products.

Exports on the National Front

U.S. farm product exports rose by a fourth in fiscal year 1980 to $40.5 billion. Coarse grain exports reached $9.6 billion, about one third of U.S. coarse grain production. Soybeans and products continued up to total exports of $8.6 billion value. Nearly 40 percent of the U.S. soybean production went overseas as beans; including soybean products, 53 percent of the country's harvest was exported. Wheat and flour exports rose to $6.6 billion, up 36 percent from the previous year. That was about 65 percent of U.S. wheat production.

As the leading wheat producer and exporter, Kansas plays an important part in the total amount of the grain produced by the United States, and that U.S. grain very nearly feeds the world.

Grain is a major food item in diets all over the world. As countries begin to develop and prosper, individual incomes rise as do standards of living. Then, less grain goes directly into the human diet. Instead, grains are used to feed animals which produce meat, milk and eggs which more prosperous consumers can afford to buy. Developed countries have the highest total grain consumption.

Wheat—Kansas gold—is one of the world's most important foods and the most widely traded grain. Wheat as a food directly produces about one-fifth of the total food calories for the world's population; for about a third of the world's people, it is the national food staple.

In 1979-80, the U.S. produced 58.1 million metric tons of wheat. The USSR and the People's Republic of China had larger production totals, but most of that wheat was consumed within the countries.

The United States has resources and technology which enable it to fill its own needs and those of many others. In 1980 it led the world with export shipments of wheat and coarse grains—sorghum, corn, barley, oats and rye.

At the end of 1980, the USDA's Foreign Agriculture Service predicted that "World trade in grains, including rice, is now expected to total a record 210 million tons in 1980-81, up by nearly six percent from the previous year and nearly double the level of a decade ago. Total U.S. grain shipments in 1980-81, including rice, are expected to total a record 119 million tons, up seven percent from 1979-80, while exports from all other origins should total around 91 million tons or three percent higher than in the previous season. The major destinations of this increased world trade are China, the Soviet Union, Mexico, Brazil, South Korea and Taiwan."

Freer World Trade a Goal

Freer world trade has improved access for U.S. farm products; U.S. agriculture must continue pushing for free world trade.

During the Tokyo Multilateral Trade Negotiations, the U.S. worked for improved export opportunities and stability by improving trading rules and workable consultative arrangements. They also wanted tariff concessions on products with high growth potential.

Some of the end results were concessions on agricultural products for the U.S. of nearly $3.8 billion in trade. The U.S. granted concessions on about $2.4 billion.

The Multilateral Trade Negotiations also resulted in new codes to deal with nontariff problems. The trading rules are a basis for a more cooperative approach to international agricultural problems and for expansion of world agricultural trade in the '80s.

The United States differs from most countries because it does not presently use direct export subsidies for agricultural products, although it has that authority.

The new code puts conditions on the use of export subsidies for agricultural products which should help protect American farmers. The conditions will prevent countries from using subsidies to get an unfair share of the world export trade in a product or to set prices substantially below those of other countries.

Valuable Customers

As more and more U.S. farm products leave the country, it becomes more important to know who the best customers are and what their future prospects will be. It also is important to be creating new markets and increasing the volume of trade with old customers. Both the government and the grain trade in the U.S. are continually engaged in such efforts.

Japan stands out as America's number one market for farm products—in fiscal year 1980, it bought $5,749 million in U.S. farm products. The USDA lists the other nations in the top ten, in order, as the Netherlands, Mexico, China, Republic of Germany, Canada, Korea, Soviet Union, Spain and Italy. Japan and the Netherlands have maintained their top status for several years. The Netherlands remains a big customer because so many of its imports are transshipped to other European countries. The biggest percentages of increases of U.S. exports during 1980 came from China, Mexico and Spain.

Top ranking U.S. exports by value that year were corn, followed by wheat, soybeans, cotton, soybean meal, tobacco, rice, grain sorghum, feeds and sugar. By volume, corn again led, followed by wheat, soybeans, milo, soybean meal, feeds, rice, soybean oil, cotton and barley. America is by far the largest producer and exporter of corn in the world. In most of the rest of the world, wheat and rice are the big grain crops.

One reason for Mexico's big increase in purchases of U.S. corn and milo is that it has oil money to spend. In its prosperity, it joins the 13 member nations of the Organization of Petroleum Exporting Countries. The USDA says those countries have doubled their grain imports since petroleum prices quadrupled in 1973. Those increases are expected to continue, although imports of rice and feed grains have been increasing faster than purchases of wheat and flour.

If trade with Japan is going to expand in the '80s, it may have a lot to do with that country's decision to expand its livestock production. According to USDA, 80 to 85 percent of all coarse grain consumption in Japan is accounted for by livestock feeding. At the same time, only two percent of its feed grains are produced domestically. Japan obviously has to buy nearly all the feed grains it uses, and it purchases most of them from the United States.

Demand for livestock products is expected to increase in Japan in this decade, caused largely by real per capita income growth and a population which is increasing at about one percent a year. Many other factors will affect just how much more grains the country will be importing, but the USDA calculates that purchases will continue to rise. It would appear that Japan will continue as America's top customer.

Food Aid Pays

America has a long history of being generous with food. U.S. food aid authorized by Public Law 480 has averaged about $1.1 billion annually for the last three years. Food aid originally was conceived as a method to do away with surpluses, mainly grains to countries that couldn't afford to buy them. The Food for Peace Act of 1966 amended PL 480 by omitting reference to U.S. surpluses and emphasizing instead the promotion of economic development abroad and the fight against world hunger and malnutrition.

History has proven that this generosity has paid off in many cases. Many countries which start by getting food aid learn to like American products and eventually become big, paying customers. American food aid was important to Japan and Western Europe in the rebuilding years after World War II; today those nations together buy about 45 percent of all U.S. agricultural exports.

South Korea, Taiwan and Brazil also left the aid program to become important cash customers. Other countries—India, Chile, Peru, Indonesia, the Philippines and Morocco—show rising amounts of cash sales. According to the USDA's publication "Farmline," in October, 1980, "Food aid now being provided for humanitarian reasons may yield similar long-term benefits. When combined with other assistance, it can help poor nations survive shortages and develop a viable economic, political and agricultural base. Developing economies and rising incomes often translate into expanding markets for U.S. exports."

More Food Needed

The U.S. today supplies about half the total agricultural products moving on the world market and about 10 percent of the rest of the world's consumption. During the '80s, it is possible that the American share of world trade could rise to three-fifths; exports could make up as much as 13 percent of the world's total food consumption.

Food production in the developing countries grew only three percent in 1978 and actually declined slightly in 1979. Food imports by those countries, however, grew an average of 6.9 percent each year during the '70s and is expected to continue growing at a rate of 3.7 percent until the year 2000. Developing countries have a big choice to make—either they find a way to increase food production by 75 percent over the next 20 years or they find ways to import larger and larger amounts of food.

Even though more food from America will be needed overseas in coming years, export-promotion programs still will be necessary. Americans must promote products which minimize pressure on the resource base and food-price inflation but maximize value added to products and benefits for the farm sector and the general economy.

Because agricultural exports have kept U.S. agriculture growing, marketing officials have what probably is the most important task in U.S. agriculture today. They must help boost agricultural exports and help agriculture meet the challenges which will face agricultural exporting in the coming decade.

It will take work to find new markets and maintain established ones. Besides the traditional markets, like Japan and the European community, there are possible new sales in China, the Middle East, North Africa and Europe.

China, with a population of nearly a billion people, has tremendous potential. Even small shifts in per capita use of such commodities as wheat and feed grains suggest tremendous payoffs from market development in China. Already, China has grown from a nonentity in U.S. farm trade just a few years ago to the fourth largest market for American farm products in fiscal year 1980.

The Middle East and North Africa, with the emergence of the OPEC nations, have tremendous buying power and potential for increased sales. Exports to Eastern Europe also seem to be growing.

Despite our leading position in agricultural production and exports, the U.S. still faces competition for which it is becoming increasingly better prepared. A communications satellite which links overseas posts with Washington allows speedy transmission of agricultural production and marketing intelligence and trade leads. This year there are 73 posts manned by U.S. agricultural counselors, attaches or officers. The USDA's export credit program is more flexible in response to interest rate changes, making it more attractive to banks and to exporters.

And, as Kansas groups are well aware, trade fair exhibits and sales teams continue to be one of the most effective means of introducing and promoting agricultural products in overseas markets. Another positive note in the export marketing picture is the existence for four regional export groups representing 44 states. Kansas is an active member of MIATCO, the group made up of Midwestern states.

Energy Affects Agriculture

Energy is a challenge and a problem which must have high priority in the coming years. The staggering oil bills that face almost all oil-importing countries will severely test the international trade system. The developing countries in particular will be affected by high oil prices.

Increasing energy costs also directly affect food production in major grain exporting nations. In the U.S., agriculture accounts for more than 20 percent of the nation's energy consumption. Since the cost of transporting grains to processing and exporting centers also has risen sharply, food prices have increased. That means higher food costs for importing countries and less purchasing power for the dollars the American Congress appropriates for grant food aid.

But the U.S. has some advantages in this case. It is an efficient producer and is the top exporter of agriculture products. Twenty-five years of market development work have given it considerable expertise which it now needs to sharpen and redouble.

Kansas Supports Export Promotion

Part of this success can be traced to an effective market development program which offers a good example of cooperation between the private and public sectors. Financial support for those market development efforts is divided between the private and the public. In recent years, private funds have made up more than two-thirds of the total spent on overseas market development. Those funds came from the producers of the products, mainly through check-off programs.

Federal funding for market development lately has averaged about 0.1 percent of the value of U.S. agricultural exports. More graphically, that means every public dollar spent to develop agricultural exports has helped to bring back nearly $1,000 in foreign exchanges. Those dollars benefit Americans—farmers and nonfarmers alike.

Kansas' large share of the United States export market for grains is no accident. Farmers donate check-offs to the Corn, Grain Sorghum and Soybean Commissions and the Kansas Wheat Commission to seek those export sales, to find and develop new markets for Kansas feed grains, oilseeds and wheat.

The Kansas Grain Commodities Act of 1977 made Kansas a leader among other agricultural states by forming the sorghum, corn and soybean commissions with one act of law. All three programs are administered under one umbrella—the grain commodities program of the Kansas State Board of Agriculture which keeps administrative costs down and efficient spending for marketing development of primary importance.

Collections from sales of sorghum, soybeans and corn, which began in 1977, are based on levies of two mills per bushel of corn and sorghum and five mills per bushel of soybeans. The average producer pays less than 20 cents per acre to fund commission activities.

Each commission meets regularly to consider market development programs that concentrate on expanding and creating new markets for their products, since export markets must be found for a quarter of the corn, a third of the sorghum and a half of the soybeans harvested in Kansas. A continuing search for new markets to develop is critically important. Market development, promotion and research are the methods the three commissions use to reach their goal of increased sales of Kansas products at good prices.

In 1978, the commissions voted to support an innovative new program for marketing—the International Grains Institute based at the KSU Food and Feed Grain Institute in Manhattan. The first such program in the U.S., it helps potential buyers of corn, sorghum, soybeans and wheat learn more about those grains and their uses. It helps foreign representatives learn exactly how Kansas products fit into their markets and individual needs.

The commission members fund research projects with the benefit of the producer in mind. They support only potentially rewarding research activities which might not otherwise find funding. Those projects are aimed at putting increased profits into the pockets of producers, since research offers the key to marketing efficiency and disease and insect control in the future.

Kansas also has become a member of the U.S. Feed Grains Council, a strong alliance which promotes foreign market expansion of U.S. feed grains. Kansas was the first state to give support from grower assessment funds to the USFGC. It previously had been funded by membership dues and donations of goods and services from agribusiness and seed companies along with matching funds from the U.S. Foreign Agriculture Service. The financial support from the Kansas commissions represented the first Kansas producer funds committed directly to international marketing development.

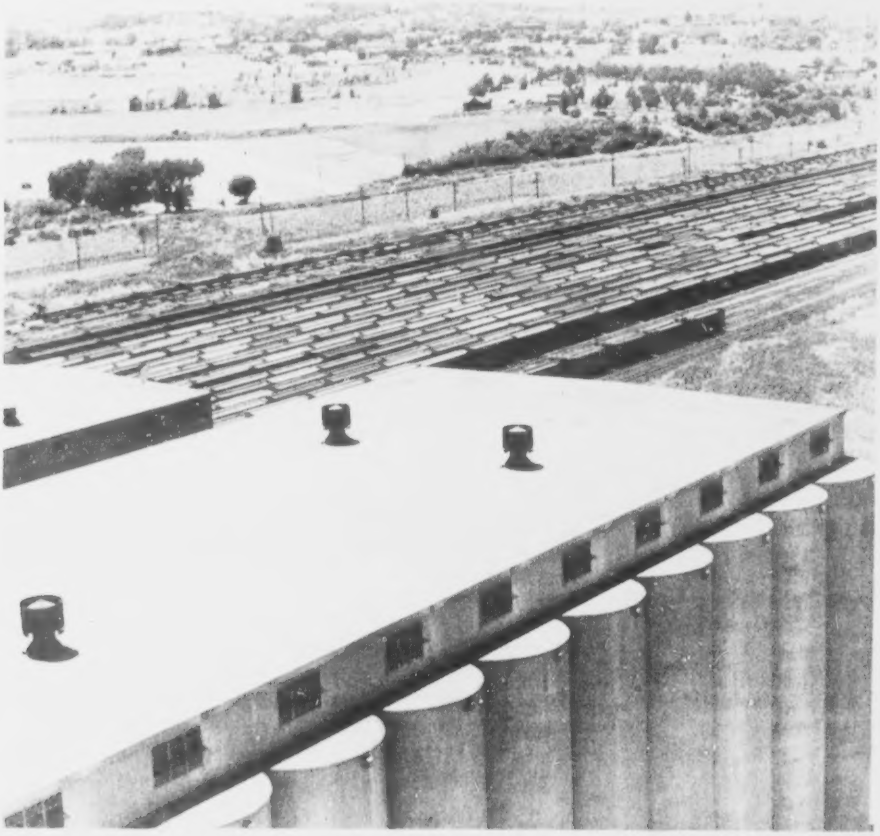
The Kansas Soybean Commission provides similar funding to the American Soybean Associations's Research Foundation. The ASA has been working since 1956 to create demand for U.S. soybeans, soybean meal and oil in foreign countries. The ASA has nine foreign offices and 100 different market development activities ongoing in 44 different countries. Since the ASA began its market development work, exports of U.S. soybeans have grown from 83 million to more than 800 million bushels per year.

Promotion Continues

Since 1970, the value of U.S. agricultural products has risen more rapidly than the world total. The contribution of agricultural exports to the U.S. balance of trade has grown dramatically. Those farm products now account for about 20 percent of the total American exports. In 1980 they contributed $23 billion to the positive side of the trade ledger. That means a stronger dollar, more jobs, a more prosperous economy and a stronger American agriculture.

As the country prospers, so will the farmers of the state of Kansas. The State Board of Agriculture, through the Kansas Sorghum, Corn and Soybean Commissions, is committed to serving Kansas producers.

Export markets must be found for one-fourth of the corn, one-third of the sorghum and one-half of the soybeans produced in Kansas. The commodity commissions will continue working to establish and expand dependable export markets for Kansas feed grains and oilseeds. Promotion of agriculture—the state's number one industry—pays off in better prices for the farmer, a strong agriculture and a stable economy.



ANNUAL MEETING OF THE KANSAS STATE BOARD OF AGRICULTURE JANUARY 14-16

Opening Business Session

President Gaylord Munson of Junction City opened the 110th Annual Meeting of the Board of Agriculture at 3 p.m. Wednesday, January 14, introducing the members of the board to the delegates assembled at the Municipal Auditorium.

Welcome to Convention

Secretary of Agriculture Bill Duitsman introduced the staff of the department and outlined what to expect at the three-day meeting. He said the meeting was planned particularly so delegates could learn more about the responsibilities of the Board of Agriculture. In 1857, in Kansas territory, the Kansas Agricultural Society was formed, the forerunner of the Board of Agriculture. The legislature established the Kansas State Board of Agriculture in 1872. It was the first department of agriculture in the United States and still today is unique in structure among other state agricultural departments. The department is governed by its board members.

Delegates to the annual meeting come from farm organizations: one for each farm organization in a county with 200 or more members; one for each organized county fair board; one for each state breed or commodity organization. Two hundred-two such delegates were preregistered for this meeting. The delegates, who attended the meeting which is mandated by Kansas law to be held yearly the second week of January, nominate members of the 12-member board in the caucus meetings during the annual convention. The formal election occurs on the last day of the convention. Kansas is divided into six districts for this purpose; two board members are elected from each district. They serve three-year terms and can

succeed themselves. The elected board members meet to elect officers and the Secretary of Agriculture.

The Board of Agriculture is a regulatory agency with responsibility for more than 60 laws divided among its nine divisions. The Board of Agriculture always strives to enforce laws on an equitable and common sense basis.

Nearly 700 people were present at the evening banquet where they were entertained by Matt Betton and his Palace Jazz Band, Manhattan.

Carlin Urges Cooperation

Greeting the assembled agriculturists, Governor John Carlin urged all Kansans to listen and stay involved with events in Topeka during the 1981 legislative session. Critical issues are facing the state in many areas, he said, including water, taxation and funding of programs which affect agriculture. Kansans must face these problems and work together to solve them.

"The Common Good—What's in It for Me?"

Keynote speaker Jim Gillie, corporate speaker for Phillips Petroleum Corporation, gave a humorous speech with a message, "The Common Good—What's in it for Me?" There are many world problems, he said. Problems of too little food, too little water, too little energy . . . too much inflation, inadequate defense and inadequate compensation for farmers, to name a few. People must work together, with a minimum of government interference, to find solutions to those problems. Americans must stop accusing each other. If they don't work together, he concluded, they all will be losers.

"We've Been Working on the Railroad."
Don Jacka, Assistant Secretary of Agriculture

"We've Been Working on the Railroad," was the topic for Don Jacka, assistant Kansas Secretary of Agriculture. He explained the many efforts the Kansas State Board of Agriculture has made to improve the railroads as a system of transportation for agricultural products. The Board of Agriculture has worked to halt Congressional moves toward rail deregulation and elimination of rail service to country elevators. He stressed that the railroad industry and agricultural marketing must adapt to coming innovations in the transportation system.

"Export Marketing—Our Vital Link," Darwin Stolte, Austen Merrick and James Howard

A cooperative effort by three experts on grain exporting and marketing was the next presentation. Darwin Stolte, president of the U.S. Feed Grains Council, presided; Austen Merrick, executive vice president of the Producers Grain Corporation, and James Howard of the Commodity Marketing Division of Cargill, Inc., participated.

According to Stolte, 63 percent of the U.S. wheat, 55 percent of the soybeans and 43 percent of U.S. feed grains are sold to foreign countries. The tremendous domestic market we have enjoyed for two centuries in the U.S. is no longer our predominant market, he said. Our predominant market for growth in the future is overseas. Farm groups, producer groups and commodity organizations such as the Kansas Corn, Grain Sorghum and Soybean Commissions contribute valuable funds to pay for development of overseas markets by training other countries how to expand livestock and poultry industries which will utilize U.S. feed grains and oilseeds.

The panel members explained further how the complex American grain marketing system functions from producer to consumer, whether that consumer is in a domestic or foreign market.

Afternoon sessions were devoted to presentations by directors of divisions of the Board of Agriculture.

Marketing

"We're Selling Your Product" was presented by marketing division director Ken Boughton. Delegates saw the taping of a program promoting Kansas agricultural products featuring home economist Charlene Patton with WIBW television farm director Kelly Lenz.

Meat and Poultry Inspection

"You're Safe With Kansas Meats," by meat and poultry inspection division director Larry Woodson discussed the history of meat inspection in the U.S. and Kansas.

Water Resources

"Keeping Tabs on our Most Valuable Resource," says Guy Gibson, Chief Engineer in the water resources division, is a massive job of administering 26 Kansas laws. He said water resources will become increasingly more important in the coming decade.

Weights and Measures

"Weigh Right to be Right," by John O'Neill, state sealer with the weights and measures division, presented some of the duties of the division, including anhydrous ammonia safety and L.P. gas meters. He described a trip to Saudi Arabia to inspect that country's new weights and measures program which was modeled after the Kansas division of weights and measures.

Weeds and Pesticides

"Weeds and Pesticides, a Right and a Wrong," by Freeman Biery, director of the weed and pesticide division, discussed the status of the musk thistle weevil as a biological control for musk thistles. He also told of several plots of Kudzu which are reproducing in Kansas. The division is experimenting with different chemical controls to deal with the potentially damaging weed.

Entomology

"Battling Those Pesky Pests" was presented by Dean Garwood, director of the entomology division. Garwood said there may be some areas with infestations of rangeland grasshoppers next summer. He also discussed a new variety of greenbug which eats varieties of sorghum and wheat which have been developed to be resistant to other greenbugs. A forecast on chinch bugs is due from the division in March.

Control

"A Guarantee for What You Buy" was presented by Bob Guntert, director of the control division. He explained the seven laws enforced by the division regulate commercial feeding stuffs, commercial fertilizer, agricultural chemicals, livestock remedies, agricultural seed, agricultural lime and soil amendments.

Dairy

"Pure Milk Products Don't Just Happen" said Brace Rowley, director of the dairy division and Kansas Dairy Commissioner. He described activities of the division to ensure pure and healthy dairy products for Kansans.

Convention delegates met at 6:30 p.m. Thursday for district meetings and caucuses.

"Feeding Alcohol Production Stillage to Cattle and Swine,"

Larry Corah, KSU Extension Specialist

The meeting convened again at 9 a.m. Friday. The first speaker was Larry Corah, Extension specialist in beef cattle, nutrition and management at Kansas State University. "Feeding Alcohol Production Stillage to Cattle and Swine" was the title of his speech, discussing an upcoming research project at KSU in cooperation with the Kansas Commodity Commissions. The research is in two phases: one, to determine the nutrient value of different types of stillage; and two, to learn more about storage and handling. Researchers have a strong interest in working with people in the state who are actually developing plants, producing alcohol fuel, and using the products.

"Is the Producer to be Masked from Production Facts?"

Moe Johnson, State Statistician

"Is the Producer to be Masked from Production Facts?" was the question asked by Moe Johnson, state statistician with the Kansas Crop and Livestock Reporting Service. His division sends and tabulates questionnaries, conducts telephone interviews, performs objective yield counts and publishes reports, ending up with a wealth of agricultural data for use by economic decision-makers such as farmers, agribusiness, banks, utilities and government. Crop reporting is a two-way street. The Crop and Livestock Reporting Service needs data from cooperating farmers and farmers need the unbiased data the service compiles.

Closing Sessions

In closing business sessions, memorial and credentials committee reports were given. Registered were 160 delegates and 98 visitors.

Elections of board members were conducted. Elected to the position vacated by retiring board member Paul Buchele was F. E. Bliss of Longton. Floyd Coen, Elkhart; Jack Beauchamp, Ottawa; and Duane Steeples, Zurich, were re-elected. The meeting concluded at 10:30 a.m.

Vignettes . . .

110th Annual Agriculture Convention

OFFICIAL DELEGATES TO ANNUAL MEETING

Darwyn Acheson, Effingham; Donnel Adams Jr., Yates Center; Loren Attebury, Kensington; J. Wendell Baker, Eskridge; Bill Bannister, Hays; Jack Beauchamp, Ottawa; Philip Beesley, Gove; Fred Berns, Peabody; Kenneth Blackwelder, Isabel; Amos Blecha, Munden; Claude Blevins, Manhattan; Marcie Blevins, Manhattan; F. E. Bliss, Longton; C. A. Boswell, Onaga; Roy M. Breedlove, Kansas City; Myron Brensing, Stafford; W. J. Brink, Lawrence; Donald Bryant, Penokee; Paul Buchele, Cedar Vale; Virginia Bundy, Paola; John Bunger, Beloit; Hobart Campbell, Kingman; Wayne Childs, Elmdale; Larry Clark, Mayfield; Roy H. Clubine, Independence; Floyd O. Coen, Elkhart; M. R. Coen, Elkhart; Carl Conger, Iola; Bill Coon, Norwich; Craig Cooper, Hoxie; Jim Criger, Howard; Greg Daily, Bavaria; William C. Daugherty, Culver; S. M. Davis, Council Grove; Warren Deeds, Scott City; Linus Deters, Baileyville; Keith F. Devenney, Junction City; Wayne Dicken, DeSoto; Dale Disberger, Council Grove; J. L. Dixson, Atwood; Les Domann, Atchison; Ronald Dunbar, Richmond; John Durler, Dodge City; Wayne Eggleston, LeRoy; Stuart Euhus, Oberlin; Robert Falk, Effingham; Howard Ferch, Oswego; Altis Ferree, Yates Center; Clarence Flory, Valley Falls; Earl Foote, Bucyrus; Alfred Friesen, Meade; James N. Gall, Reserve; William Gerdes, Herkimer; Fred Germann, Dwight; Robert A. Gottschalk, Hutchinson; Robert Grisier, Yates Center; Fred Hadle, Gardner; Oliver Hagg, Salina; H. J. Haley, Derby; Don Hall, Fort Scott; Mrs. Willis Hall, Eureka; Willis Hall, Eureka; Charles E. Hamon, Valley Falls; R. V. Harden II, Englewood; Donald Harvey, Collyer; Robert Haselwood, Berryton; Jim Hearn, Pratt; George Heersche, Mulvane; Michael Herrmann, Kinsley; Russell Hicks, Satanta; Don Hildebrand, Fowler; Dean Hobelmann, Republic; John D. Holliday, Liberty; Harold Hon, Neodesha; Jared O. Hoover, Abilene; Audean Horn, McPherson; Harvey Horton, Kendall; Earle M. Hunt, Arkansas City; Irving Imhof, Brewster; Richard Jahnke, Leonardville; Donald W. Keeten, Glade; Lonnie Kent, Hutchinson; Ralph Kimzey, Elk City; Elwood C. King, El Dorado; Melvin Kline, Galena; Marvin Klumpe, Madison; Bob Kobetich, Longford; Herman Koch, Clyde; Don Krey, Rolla; Roland Kruse, Waterville; Leon Lallier, Kansas City; Tom Lane, Osage City; Elmer Lehmann, LeRoy; Dale Leickliter, Nickerson; Ewing Lyle, Ulysses; Harold McDonald, Williamsburg; Doyle McGraw, Garden City; Joe J. McQuillan, Clearwater; Jerry McReynolds, Woodston; Edwin McWilliam, Pleasanton; Jack Martin, Hugoton; Paul Martin, Fontana; William Martin, Glasco; Darrol Miller, Coldwater; Carl Mills, Cedar Vale; Hubert Mueting, Axtell; Lawrence Murphy, Girard; Kenneth Muller, Council Grove; Gaylord R. Munson, Junction City; Paul M. Nauer, Jennings; Don Nepote, Girard; Edward J. Oborny Jr., Bison; Rodney Ohlde, Palmer; John C. Oswald, Hutchinson; E. J. Pannbacker, Washington; Bernis Parker, Manhattan; Gary Parker, Moran; Ted Partch, Bird City; Kathy Patton, Manhattan; Jim Ploger, Kinsley; Myrtle Posson, Norton; Dee Potter, Syracuse; Edna Mae Powell, Hazelton; Fern Raleigh, Windom; Charles Reed, Peru; Dwayne Reever, Liberal; Richard R. Reinhardt, Erie; Jack Rickford, Marienthal; Gale Ritter, Iola; Dale Roberds, Pittsburg; Roscoe Rodgers, LeRoy; Raymond Roemer, Gove; Don Sailors, Erie; David M. Schurle, Manhattan; Charles Shaffer, Waldo; Darrel Shaffer, Dighton; Leonard Sharp, Great Bend; James Lee Sheckler, Tribune; Richard Sherer, Mullinville; James Siemens, Burrton; Leon Sinn, Fort Scott; Vance Smith, Larned; Stanley Sommerfeld, Sharon Springs; Duane Steeples, Zurich; Robert Stone, Spring Hill; Alan Sullivan, Hugoton; Robert Teagarden, La Cygne; Frank Titmus, Girard; Homer Tucker, Burlingame; Carson Ward, Caldwell; Jere White, Garnett; David Wieland, Oakley; Howard C. Wilson, Sharon Springs; Ken Wiltse, Timken; Paul Winckler, Sylvan Grove; Donald Winter, Frankfort; John Wise, Linwood; Merle Wright, Sublette; Clarence Wulfkuhle, Berryton; Frank Zwaduk, Wathena.

BLISS ELECTED TO BOARD

The newest member of the Board of Agriculture is F. E. Bliss of Longton. Representing the third district, he took the seat on the board which was vacated when Paul Buchele of Cedar Vale retired.

The 50-year-old farmer and rancher was elected treasurer of the Board.

Bliss is a native of Arkansas City. He graduated from Oklahoma State University with a degree in animal husbandry and has farmed for 30 years. The last 15 of these have been spent near Longton.

Bliss is a Quarter Horse breeder and has a cow-calf operation. Besides farming and ranching, he is a realtor and auctioneer.

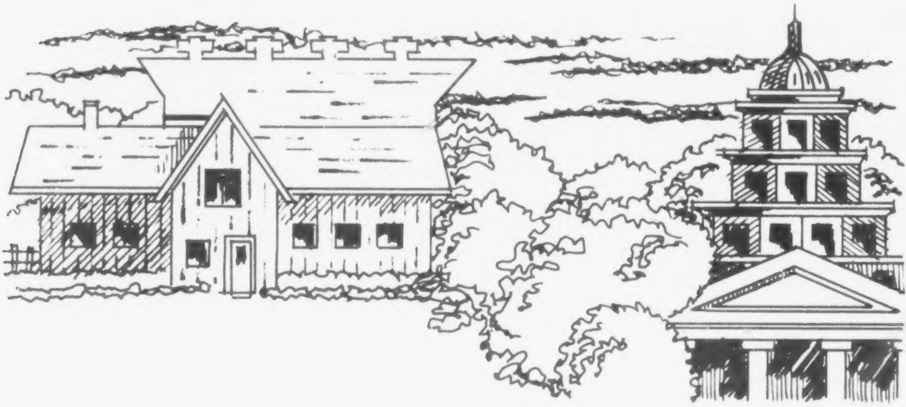
The new board member formerly worked as a 4-H Club Agent in Cowley County and Agricultural Extension agent in Elk County. He is a member of the board of the Kansas Quarter Horse Association.

He and his wife, Gwen Huene Bliss, are the parents of two children.

Former Kansas Representative John Vogel was honored at the Annual Meeting of the Kansas Board of Agriculture when President Gaylord Munson presented him with a plaque recognizing his service to agriculture.

Representative Vogel was elected to the Kansas House of Representatives in 1962, and served 18 years.

He served on several committees including 18 years on the House Agriculture Committee. For 14 years he was chairman of that committee.



Kansas Agriculturists Recognized

Elected to a second term as president of the National Holstein Association was **Ivan K. Strickler,** Iola. Strickler farms 1,100 acres and has a milking herd of about 175 registered Holsteins. He was named Man of the Year by the World Dairy Expo in 1978.

Kansas Honey Queen for 1980 is **Diann McCallum,** 18, of Mission. She is the daughter of Mr. and Mrs. M. R. McCallum.

David Breiner, Alma Hereford breeder, was elected chairman of the Kansas Beef Expo. Breiner is the managing partner of Mill Creek Herefords and a past president of the Kansas Hereford Association. **Ancel Armstrong** of Manhattan was elected vice-chairman.

Members of the American Meat Science Association elected KSU professor **Donald H. Kropf** chairman for the 1981 Reciprocal Meat Conference. He received the group's Distinguished Teaching Award in 1976.

Debbie Brown, Wichita, was named Miss Rodeo Kansas for 1980. The 21-year-old queen is the daughter of Mr. and Mrs. Melvin Brown, Paola.

Junction City resident, **Charles Munson,** was elected to a one-year term as chairman of the State Extension Advisory Council. The council is a 20-member group of County Extension board chairmen who guide Extension policies and program. His term ended in the fall of 1980.

Larry Montgomery, a former Topekan who formerly had served as director of international trade with the Kansas Department of Economic Development, was named president of U.S. Wheat Associates.

A Yates Center man was named one of three National Cattlemens Association Advisory Council chairmen. **J. Richard Pringle** chairs the Cow/Calf-Stocker Advisory Council. He is a member of the NCA executive committee.

Feona Clark, Barnard, was crowned 1980 Kansas Polled Hereford Queen. Princesses named were **Lori Riffel,** Enterprise, and **Nancy Shearer,** Americus.

Elected first vice president of the American Soybean Association was **Charles E. Hamon** of Valley Falls. Hamon, a member of the Board of Agriculture and chairman of the Kansas Soybean Commission, has represented Kansas soybean growers on the ASA Board of Directors since 1976. He has served as ASA vice president and research committee chairman in 1979-80 and secretary in 1978-79.

Natalie Haag, Holton, was named "Miss Agriculture" at Kansas State University's College of Agriculture. She is the daughter of Mr. and Mrs. Gale Haag.

For the second year in a row, **Herbert McReynolds** of Osborne won the Wheat Sweepstakes Grand Prize at the Kansas State Fair. With the prize came the title of "Kansas Wheat King." McReynolds exhibited Eagle wheat.

Grange Honors Former Board Member

Otis Douglas, retired farmer-stockman from Burlington, received the annual Award for Distinguished Service to Agriculture from the Kansas State Grange in 1980.

Douglas was a member of the Board of Agriculture for 20 years, serving as president in 1973. He also was a member of the Board of Managers of the Kansas State Fair.

He served three terms in the Kansas House of Representatives from Coffey County. As a community leader, he was a 4-H leader, school board member, board of director of the Peoples National Bank of Burlington, and helped organize and was a member of the steering committee which planned the Big Creek Watershed District. He served on its board of directors from 1961 to 1977.

A member of the Coffey County Fair Association's board of directors, he also was honored by the Coffey County Soil Conservation District for 20 years of service as a supervisor. He is a past president of the Coffey County Farm Bureau.

He has held a number of offices in his 65 years as a member of the Grange. He was county deputy from 1930 to 1935; served as Steward of the Kansas State Grange for 18 years; and served on the executive Committee of the Kansas State Grange from 1955 until ill health forced him to retire in 1977.

An outstanding group of Kansas leaders posed with Governor John Carlin for the proclamation of Kansas Farm-City Week, Nov. 21-27. Pictured (left to right) are Gordon Hibbard, Kansas Farm Bureau; Forest Boerner, Federal Crop Insurance; Paul Mecham, Federal Crop Insurance; Lewis Cline, Kansas Grange; M. E. Johnson, Kansas Crop and Livestock Reporting Service; George Pickell, State Bank of Fredonia; John Price, Merchants National Bank of Topeka; Mary Gehrt, United Farm Wives; Rich McKee, WIBW television farm department; Bill Duitsman, Kansas State Board of Agriculture; Jack Denyer, Farmers Home Administration; and Bill Ohlemeier, Kansas Electric Cooperatives.

Schoolwork, paperwork or farm work, the Jerry Thomas family of Dunlap pitches in to make their farm an efficient, family operation. Honored as the 1980 American Royal Kansas Farm Family, the family includes (left to right) Tarah, 16; Bonnie Thomas; Jerry Thomas; and 13-year-old Amy.

Kansas Family Honored at 1980 American Royal Livestock Show

A family of four from Morris County was honored as the American Royal Kansas Farm Family for 1980.

Jerry and Bonnie Thomas have two children, Tarah, 16, and Amy, 13. The entire family was honored Nov. 19 on Kansas Day at the American Royal in Kansas City. The Thomases raise crops and background beef cattle on their 3,438-acre farm near Dunlap.

Born in El Dorado, Jerry moved with his family to Morris County at age five. He started farming in partnership with his father, F. W. Thomas, in 1959.

Bonnie, a registered nurse who works part time outside the home, was reared on a farm near Junction City. After their marriage in 1962, Jerry and Bonnie started their farmstead near the Thomas family farm. They took over the operation from Jerry's father in 1975.

The Thomases background about 750 beef cattle a year. They own about 340 acres and rent the rest, with some 800 acres cultivated and the rest pasture. Their cropping program is designed to provide feed for the cattle. Under normal conditions, the 300 acres of milo and 200 acres of corn they raise meet their feeding needs. Another 300 acres are divided between wheat and soybeans which are sold as cash crops.

The Thomas girls also are achievement oriented. Both are active in 4-H and school activities. The family attends the Lutheran Church in Council Grove. Jerry has served on the Morris County Farm Bureau Board, the Morris County Extension Board, District 417 School Board, the Morris County Fair Board and is a 4-H Club leader.

Peterson Receives National Award

The American Soybean Association has recognized what many Kansans already knew—Verlin Peterson is "Mr. Soybean" in Kansas. The ASA gave Peterson its "Meritorious Service Award in Extension Education" at its 1980 annual national meeting.

Kansas farmers knew little about soybeans as a crop just 20 years ago. Peterson did research which proved soybeans could be profitably grown in southeast Kansas. Through his further efforts, soybeans today are a profitable and popular crop, worth more than $200,000 annually, and grown in almost every Kansas county.

Working in Cherokee County and Mound Valley, Peterson pioneered studies of in-the-row and between-the-row spacings, root behavior, fertilizer rates, seeding rates and weed control.

Peterson was the co-author of a soybean handbook which still is an authority for soybean production in Kansas. That led to the rapid expansion of soybean planting in the 21 counties of the southeast Extension district. He then moved to Manhattan and became a production specialist for the total state.

Not satisfied yet, he and the late Russell Herpich, extension irrigation engineer, began the Soybean 70 Irrigation Project which proved central and west-central Kansas, too, could produce soybeans under irrigated conditions.

He moved Kansas growers to form the Kansas Soybean Association in the early '70s. It now has 400 members. He helped begin a statewide grower's contest which helps generate interest in soybeans. His soybean field days continually attract attention from farmers.

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TER · DALLAS

Herb and Margaret Pickens, retired locker plant operators from Burden, received the 1980 Achievement Award from the American Association of Meat Processors. It is the association's highest honor, presented at the group's annual convention. The Pickenses, who owned the Burden plant for 29 years before retiring, were honored for "outstanding service to the American Association of Meat Processors and the industry." (Photo courtesy of The National Provisioner)

Farm Bureau Recognizes Excellence in Kansas Members

Raebern and Deadra Nelson

Young Farmers Award to Nelsons

Raebern and Deadra Nelson, Chanute, both believe in and practice family farming. The success of their efforts led to their being named to receive the Kansas Farm Bureau's Young Farmers and Ranchers Award for 1980.

The high award recognizes the farmer or rancher who has demonstrated outstanding achievements in management and leadership. Winners are selected on the basis of participation in community, agriculture and Farm Bureau activities.

Mr. and Mrs. Nelson both are 1976 graduates of Kansas State University. Raebern's interest in agriculture came from a 4-H steer project; at K-State he gained experience with swine operations.

Today the Nelsons farm about 600-800 acres of milo, soybeans and wheat. They have some cattle and a farrow-to-finish hog operation. They also work with Raebern's father who farms 1,000 acres.

Mrs. Nelson was a music teacher until the 1980 arrival of a daughter. She keeps financial records for the farm and teaches private lessons in guitar and piano.

Reinhardt is Women's Chairman

Linda Reinhardt is the new state Farm Bureau Women's Chairman. Mrs. Reinhardt and her husband, Richard, operate a Grade A dairy farm in Neosho County near Erie. They have 125 registered Holsteins and 800 acres producing milo, alfalfa and wheat.

She has been an active Farm Bureau member for 21 years, serving as county safety chairman, county womens' chairman, Third District Woman Leader of the Year and delegate to both state and national Farm Bureau meetings.

In 1975 she won the District Safety Award and served as chaperone of the National Safety Congress for two years. Linda also served as District Women's Chairman prior to accepting the state office.

Mr. Reinhardt is a member of the State Board of Agriculture. The couple are the parents of three children.

York is Farm Bureau Queen

Mary Lea York, 27, was chosen Kansas Farm Bureau Queen. Mrs. York and her husband, James, farm near Thayer. When depressed farm prices forced her husband to take a job in town, she took over the farm chores.

Mrs. York, a licensed cosmetologist, is active in church work and works part time at a local sale barn. She and her husband have two children.

The Yorks own 160 acres and rent another 60. They raise wheat, soybeans and milo, and have a herd of 60 sows and gilts.

Pictured above are the Queen Mary Lea York, seated; and (left to right) Margaret Rose Kalb, Douglas County; Yvonne Kay Visser, Clay County; and Kathy Toll, McPherson County, 1979 Kansas Farm Bureau Queen.

Schurle is Kansas Dairy Leader

David Schurle, 1979 president of the Board of Agriculture, was recognized as the 1980 Kansas Dairy Leader by the Kansas Interbreed Dairy Cattle Council. A dairyman in the Manhattan area for the last 40 years, Schurle was honored for his many contributions to the Kansas dairy industry.

He was presented with a certificate of honor at Kansas State University's annual Dairy Day in Manhattan.

Schurle has produced nationally known registered Jersey cattle. His herd had a Dairy Herd Improvement Registry average of 13,223 pounds of milk and 659 pounds of butterfat and an appraisal score of 84 26 percent. It had the highest Jersey estimated average transmitting ability of 751 pounds of milk and 26 pounds of butterfat in the Mid-States Dairy Records Processing Region, and ranked seventh in the nation in milk production in the American Jersey Cattle Club.

The award recognized that 35 "Ton-of-Gold" cows, 10 individuals classified "excellent," and three "superior" sires were bred at Schurle's Rose LaMar Farm. It also mentioned Schurle's many community, family and agricultural activities.

Schurle, a current member of the Kansas State Board of Agriculture, is a lifelong resident of Riley County. He has received the Bankers Award for Soil Conservation and an efficiency award for superior achievement in dairying from a national dairy production corporation. He is a past president of the Kansas Jersey Cattle Club and the Kansas Interbreed Dairy Council. He also has been director of the Kansas Dairy Herd Improvement Association.

His memberships include the National Dairy Shrine Club, the Riley County Livestock Association, the Riley County Water District and the Riley School Board. His 20 years as a 4-H club leader earned him that group's alumni award.

Named "Distinguished Dairyman for 1980" at the annual Kansas Interbreed Dairy Cattle Council banquet was 73-year-old John Heersche of Mulvane.

Heersche was a key person in the formation of Associated Milk Producers Inc., (AMPI) of Wichita. He was instrumental in starting the Sedgwick County Milk Producers Association, now a part of AMPI, which was a pioneer bargaining association for dairy producers.

Born in Holland, Heersche and his family settled in the Mulvane area when he was 11 years old. From his beginning with one cow, he now operates a 96-cow registered Holstein herd.

Heersche was director of the first Wichita Milk Producers Association, Southwest Milk Producers Association, Southwest Dairymen, AMPI and president of the board for many years. He was a member of the AMPI board of directors for some 30 years. He has been president of the Kansas Holstein Association and a national delegate.

He also is active in church and civic activities. He and his wife, Roberta, have three daughters and five sons. One son, Don, is a partner in the Heersche farm at Mulvane.

Kansas Livestock Association President Jim Ungles is a native of Satanta. He received a D.V.M. from Kansas State University. Leaving Kansas after graduation, he worked in Arizona and Texas for a time, then returned to practice veterinary medicine in Meade for four years.

Ungles then returned to Satanta where he and his brother, Bud, operate a family corporation consisting of a calf backgrounding and growing operation, plus grain production.

Ungles has served on the KLA Board of Directors and is past chairman of the animal health committee.

KSU Teams Lead Nation

In 1980, various KSU judging teams again brought a number of honors back to Manhattan.

At the National Western Stock Show in Denver, Mary Jane Hanson, Pawnee Rock, was high individual in the wool judging contest. Her team placed sixth. Also placing was the junior livestock team, fifth out of 29 teams and high in beef judging. The meats team placed sixth.

It was a first place finish for the KSU livestock judging team at the Southwestern Exposition in Fort Worth. The team, coached by Bill Able, placed first in beef and swine judging, sixth in sheep judging and fifth in horses.

Team members were Marlin Benton, Lebo; Alysia Allen, Liberty; Brad Rayl, Hutchinson; Sherry Whitesell, Holton; Vern George, Lebo; Brian Murphy, Girard; and Keith Ascher, Junction City. Whitesell was high in beef judging.

Coach Able's student livestock judging team maintained its national dominance in November when it captured the American Royal title for the second year in a row and the fourth time in the past seven years.

The judgers were high team in judging quarterhorses and cattle, fourth in sheep and first in reasons. They won the quarter horse trophy for the third time in the past four years.

Lorna Sutor, Zurich, was second high individual in the contest and top in quarter horse judging. Alysia Allen, Coffeyville, was second in cattle and quarter horses. Other team members were Travis Mann, Potwin, Mark Muller and Chuck Johnston, Coffeyville.

A new direction for KSU judging, its first horse judging team, took first place at the World Champion Collegiate Quarter Horse Judging Contest Nov. 21 in Oklahoma City.

Coach Dennis Sigler said the two teams finished first and fifth in overall points.

Members of the top team were Patrick Burton, Plainville; Dino Cornay, Folsom, N. Mex.; Mark Muller, Coffeyville; Travis Mann, Potwin; and Kevin Dwyer, Overland Park.

Members of the second team were Keith Ascher, Junction City; Betsy Claflen, Overland Park; Steven Joonas, Lebo; Kelly Rowland, Hutchinson; and Charlotte Clack, Manhattan.

National Group Recognizes KSU Teacher

Deloran M. (Dell) Allen, associate professor in the department of animal sciences and industry at Kansas State University, received the 1980 Distinguished Teaching Award from the American Meat Science Association.

Allen is widely known for his coaching of meat judging teams and in-depth knowledge of USDA beef grading standards.

He was the first president of the Intercollegiate Meat Coaches Association and has served on the performance committee of the American Simmental Association and the meat promotion committee of the Kansas Livestock Association.

Bruce Ott, left, and his father, Kenneth, right, tell Clifford Spaeth, center, extension sheep specialist at KSU, how a lambing operation improves the cash flow picture and how it works in well with a cropping program.

Ott Named Master Lamb Producer

Kenneth Ott of Maize was named Kansas Master Lamb Producer in December at the annual meeting of the Kansas Sheep Association. Sponsors of the Kansas Shepherd Superama Master Lamb Producer Program are Mid-America Harvestore, Inc., Salina; the Kansas Cooperative Extension Service; and the Kansas Sheep Association.

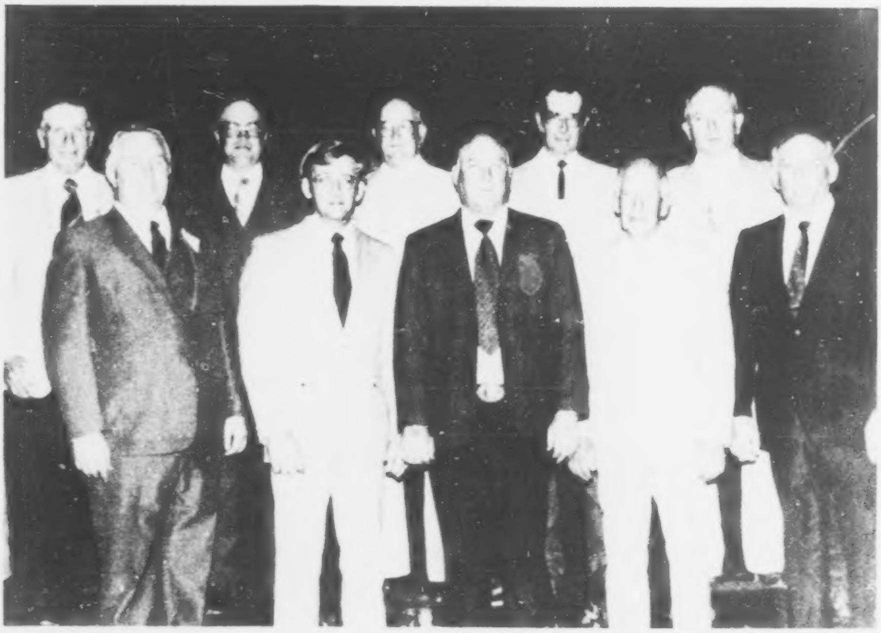
The 67-year-old Ott has some 900 ewes on his 2,000 acres near Maize. At lambing, when as many as 72 new lambs may appear during a 24-hour period, the business becomes a real family operation. Everybody pitches in—Ott; his wife, Winifred; son and daughter-in-law, Bruce and Teresa; daughter and son-in-law, Mary Ellen and Jim George; grandchildren; and neighbors.

Ott is a second generation sheepman who says he has been in the sheep business since he was nine years old.

In 1980, Ott's ewe flock had a 122 percent lamb crop at lambing; he marketed a 117 percent lamb crop. His Columbia-Rambouillet ewes are crossed with Suffolk or Dorset bucks and kept on 170 acres. He flushes on 90 acres of rye pasture, 20 acres of brome or 40 acres of sudan. Alfalfa, about 200 bales per week, is ground and sometimes mixed with wheat straw to be used with milo as a creep feed for lambs. He and Bruce, who is president of their farm corporation, also have 500 acres of alfalfa hay and raise about 800 acres of wheat and milo.

Ott is past president of the Kansas Sheep Association, past director of the Kansas Livestock Association, and is active in his church, Kansas Farm Bureau and Shrine. His wife is past president of the auxiliary of the Kansas Sheep Association and presently is involved in efforts to promote lamb.

Kansas Polled Hereford Queen Feona Clark, 18, is a student at Kansas State University. She is the daughter of Mr. and Mrs. Bill Clark, Barnard.



The board of directors of the Kansas Polled Hereford Association, pictured left to right, are George Wingert, Ottawa; Karl R. Magnusson, vice president from Winfield; Merle Moberly, president from St. Francis; Arnold Wittorff, secretary from Inman; and Virgil Staab, Hays, all in the front row. Pictured in the back row are Walter Lewis, Larned; Bill Clark, Barnard; Floyd Coen, Elkhart; Kenneth Snapp, Westmoreland; and Kenneth Hershberger, Sedgwick.

Kansans Win National 4-H Awards

Kansas had four national award winners in 4-H project work during 1980. They are David Strawn, Cimarron; Malea Husted, Spring Hill; Amy Jo Reinhardt, Erie; and Kim Petibone, Kanorado.

David Strawn, a winner in agriculture, received a $1,000 scholarship from International Harvester, along with a trip to the National 4-H Congress in Chicago. David now is studying agricultural mechanics at Dodge City Community College, with future plans to return to the family farm in Gray County. For four years, David was president of his Cimarron Rustlers 4-H Club, and was a member of the Gray County 4-H Council. He farmed 280 acres in cropland for his 1980 4-H projects; then took on added responsibilities when the injury of his father made it necessary for him to manage the harvesting of 700 acres of wheat.

Malea Husted received a $1,000 scholarship and a trip to Chicago from Mobay Chemical Corporation for her winning entomology project. A Spring Hill resident, she is president of her senior class at Gardner-Edgerton High School. Entomology has been her biggest interest during her 11 years of 4-H. In her 1980 project, she sprayed house foundations to control grasshoppers, fleas, ants, roaches, spiders and crickets as a free community service. Malea is president of Happy Go Getters 4-H Club in Miami County.

Amy Jo Reinhardt's outstanding work in safety earned her a $1,000 scholarship from the General Motors Foundation and a trip to Chicago. Amy has written and spoken about safety numerous times, and served as her club's safety leader. She is state secretary of TASK, a teen safety group. A student at Erie High School, she is a member of Neosho County's Best Yet 4-H Club. Amy Jo also is interested in dairy foods and became a state Youthpower winner with a project on Japanese nutrition.

Kim Petibone of Kanorado traveled to Chicago and received a $1,000 scholarship from the American Quarterhorse Association for her horse project. Kim is a member of the Country Clovers 4-H Club and has been secretary of the Sherman County 4-H Council. A student at Kansas State University, she learned to ride as a small girl. To help pay for the expenses of her horses and horse show attendance, she raises colts and sells them as yearlings. In 1980 she and a friend had sessions to teach younger children to ride.

The Nelson Galle family, Moundridge, was named 1980 4-H Family of the year.

Malea Husted
Spring Hill
Entomology

Kim Petibone
Kanarado
Horses

Amy Jo Reinhardt
Erie
Safety

David Strawn
Cimarron
Agriculture

4-H Names Moundridge Family

Finding enough time for all family activities and projects would seem to be a problem for the Nelson Galle family of Moundridge. That they are successful is proven by the fact they were named Kansas 4-H Family of the Year for 1980.

Nelson Galle and his wife, Marilyn Pence Galle, are the parents of three boys: Russell, in 1980 a freshman at Kansas State University; Randy, a senior at Moundridge High School; and Ron, a seventh grader.

Galle spent several years as a vocational agriculture teacher at Goessel and now is an executive for the Hesston Corporation. His wife is a substitute teacher in the Moundridge school system.

4-H Club activities are almost a family tradition with the Galles. Nelson's parents, Mr. and Mrs. Dale Galle, were the first community leaders of Better Farms 4-H Club. Nelson became a charter member in 1946.

Marilyn's father, Lester Pence, was the first community leader of the Bethel 4-H Club where Marilyn was a member. Russell and Randy became members of the Better Farms Club in 1971.

The family is involved in church and community activities, the PRIDE committee and the Board of Education. The Galle boys have been active and received honors both in FFA and 4-H.

Twenty other Kansas families were nominated as Kansas 4-H Family of the Year.

Reorganization Implemented at KSU

During 1980 a reorganization of leadership in agriculture and related programs was implemented at Kansas State University.

The new leadership team is made up of Dr. John Dunbar, named dean of agriculture and director of the agricultural experiment station; Dr. Fred Sobering, associate dean of agriculture and director of the Cooperative Extension Service; Dr. David Mugler, associate dean of agriculture and director of resident instruction; and Dr. Jim Ozbun, associate dean of agriculture and director of research.

The reorganization of KSU's agricultural programs went into effect Jan. 1, 1981. All three newly appointed associate deans will report to Dean Dunbar.

Dr. Sobering's title of associate dean and director of the Cooperative Extension Service replaces the former title of director of the Extension Service. He will provide administrative leadership to the activities of the 492 KSU faculty members assigned state, area and county extension duties in Kansas.

Dr. Mugler's new position as associate dean and director of resident instruction will utilize his talents as a teacher and advisor for on-campus agricultural programs.

Dr. Jim L. Ozbun, an associate dean and director of research, will advise and counsel the dean on research programs in and related to agriculture. He also will coordinate research efforts between on-campus departments and KSU's branch experiment stations.

Shugart Honored by ADA

Grace Shugart, retired head of the department of dietetics, restaurant and institutional management at Kansas State University, received the highest honor given by the American Dietetic Association during 1980. She received the Marjorie Hulsizer Copher Memorial Award as a "pre-eminent member" of ADA.

Shugart served at KSU for 24 years. She headed the department from 1957 until her 1975 retirement. She was active in the American Dietetic Association, serving as president in 1968-69. She is co-author of "Food for Fifty," a textbook which is considered a classic in its field, and the 1977 revision of "Food Service and Institutions."

A 1931 home economics graduate of Washington State University, Shugart received that institution's distinguished alumni award in 1978.

Corah is Outstanding Scientist

Larry R. Corah, extension beef cattle nutrition and management specialist at Kansas State University, was named the 1980 winner of the Midwestern Section of the American Society of Animal Science and Industry's "Younger Scientist Extension Award."

The award goes to an individual young scientist for conducting an outstanding extension program in animal science. Corah, 37, is extension state leader of the Kansas animal sciences and industry program.

Commodity Commissioners Listed

Members of the Kansas Corn Commission are Maurice E. (Jack) Gray, chairman, Highland; Norman K. House, Goodland; William V. Mai, Sharon Springs; Curtis A. Ramsay, Johnson; Jim Sjogren, Concordia; Laurel A. Dirks, Pawnee Rock; E. Eugene Wolf, Burrton; Jere L. White, Garnett; and Joseph L. Elnicki, Girard.

Members of the Kansas Sorghum Commission are Rudolph A. Vopata, chairman, Marysville; Irving L. Imhof, vice chairman, Brewster; Lawrence A. Peter, Tribune; Otis Lee Daniels Jr., Rolla; Dennis Hommon, Smith Center; Leon Suderman, Hillsboro; Ralph B. Henning, Kingman; Steven P. Russell II, Paola; and Leonard L. Biggs, Madison.

Members of the Kansas Soybean Commission are Charles E. Hamon, chairman, Valley Falls; Russ Sylvester, Ottawa; Rosemary T. Miller, Greeley; Willard V. Judd, McCune; Byron Brooks, Manhattan; Betty Ratts, St. John; and W. Stanley Compton, Larned.

Named to act as coordinator and administrator for the three commissions during the year was Galen Swenson. A Salina native, Swenson is a graduate of Kansas State University who joined the Board of Agriculture in 1978. He replaced Terry Nygaard, who resigned the position to join the staff of the Kansas Farm Bureau in Manhattan.

Dean Hoeflin Leads AHEA

Dean Ruth Hoeflin of the Kansas State University College of Home Economics was named president-elect of the American Home Economics Association during 1980. She will assume office at the 1981 annual meeting.

Hoeflin came to KSU in 1957 as head of the department of family and child development. She was promoted to associate dean in 1960 and to dean in 1975.

A native of Fort Dodge, Iowa, she graduated from Iowa State University, received an M.S. from the University of Michigan and a Ph.D. from Ohio State University. Before joining the KSU faculty, she had taught at Merrill Palmer Institute in Detroit, Oklahoma State University and Ohio State University.

KANSAS HONE

The 1980 Kansas Honey Queen, Diann McCallum, is a performing arts student at the University of Missouri at Kansas City. She is the daughter of Mr. & Mrs. M. R. McCallum of Mission.

Officers of the Kansas Association of County Agricultural Agents are, from the left, Jack Barnes, vice president from Harvey County; Bob Frisbie, secretary-treasurer from Pawnee County; and Joe Smith, president from Montgomery County.

Extension Groups Choose Leaders

A number of people were elected to lead Kansas county extension agent groups for 1980-81.

Joseph M. Smith, Montgomery County, was elected president of the Kansas Association of County Agents. Robert L. Frisbie, Pawnee County, is secretary-treasurer, and John H. Barnes, Harvey County, vice president.

Leading the Kansas Association of Extension Agents are President Lila M. Abercrombie, Saline County, and James L. Lindquist, Riley County, secretary-treasurer.

David E. Kehler, Cherokee County, is president of the Kansas Association of Extension 4-H Agents. Other officers are Lynne L. Matile, president-elect, Johnson County; Kimberly A. Bradley, secretary, Ford County; Terrence L. Mannell, treasurer, Ellis County; and Gregory K. Hutchins, publicity-membership, southeast area.

Officers of the Kansas Association of County Home Economists are Margaret A. Hund, president, Jackson County; Jean K. Clarkson, president-elect, Pratt County; Carol H. Young, first vice president, Edwards County; Janet F. Stephens, second vice president, Greenwood County, Mary Lou Z. Mitchell, secretary, Saline County, Diane S. Helmuth, treasurer, Douglas County; Margaret A. Gomez, historian, Cowley County, and Sandra A. Shields, parliamentarian, Ottawa County.

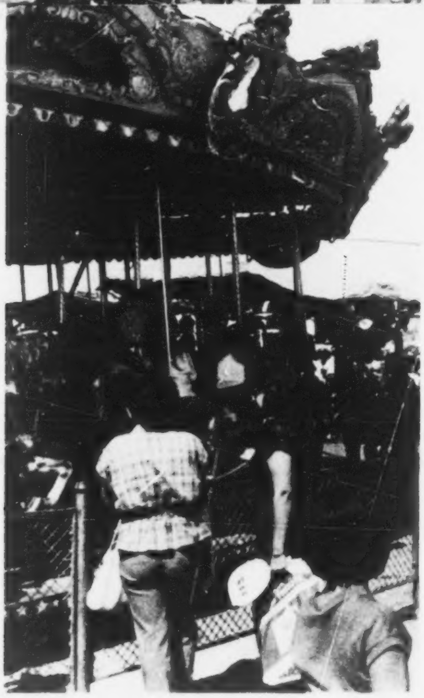
At the National Association of County Agricultural Agents annual meeting, Ray Etheridge, Medicine Lodge, and Dale Jepsen, Russell, were honored by their peers when awarded the NACAA's Distinguished Service Award. Sedgwick County Agent Steven Westfahl received the group's Achievement Award.

Leading the Kansas Association of County Home Economists are, seated, left to right, Margaret Hund, Jackson County, president; Jean Clarkson, Pratt County, president-elect; Carol Young, Edwards County, first vice president; and Mary Lou Mitchell, Saline County, secretary. Standing are Margaret Gomez, Cowley County, historian, and Diane Helmuth, Douglas County, treasurer. Not pictured are Janet Stephens, Greenwood County, second vice president, and Sandra Shields, Ottawa County, parliamentarian.

Officers of the Kansas Association of 4-H Agents are (left to right) Lynne Matile, Johnson County 4-H agent, president-elect; Greg Hutchins, southeast area 4-H youth specialist, publicity and membership chairman; Dave Kehler, Butler County 4-H agent, president; Terry Mannell, Ellis County extension agriculture agent, treasurer; and Kim Bradley, Ford County 4-H agent, secretary.

1980 KANSAS STATE FAIR

CATTLEMAN'S STEAK HOUSE
DALUPE
AFE
KNIGHTS OF COLUMBUS
PIZZA
Dairy Queen

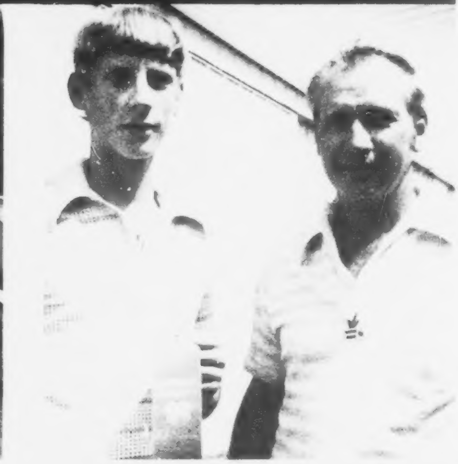


Fair Facts

Nearly a quarter of a million attended, despite record high temperatures . . . 125 head of dairy goats judged . . . 60 draft horses in competition with Ellis Flickner, Kingman, showing grand champion stallion and mare and reserve champion mare . . . Ronald L. Reed, Longton, top winner in the tractor pulling contest . . . Herbert McReynolds, Osborne, winner of the Wheat Sweepstakes Grand Prize . . . Ellinwood FFA tops in farm mechanics competition . . . 2,037 horses in open class judging . . . 685 head of dairy cattle judged . . . 536 entries in the beef cattle division . . . Wilma Olds, Wilson, winner of the Governor's Cookie Jar competition . . . Doris Barb, El Dorado, tops in Breadbasket competition . . . 200 exhibitors . . . biggest crowds saw Charlie Pride, Anne Murray and the Statler Brothers entertain.

New Record, New Events

the fair
the
Kansas State
fair
the fair



Keenan Beauchamp, Ottawa, was the winner of the 4-H Tractor Operators Contest.

Robert Wedle, Goessel, poses with Loren Doll of the Kansas Wheat Commission after Wedel was named winner of the 4-H Variety Plot Contest.

Pictured are Karen Frey, Satanta, and her 1,185-pound crossbred steer which was grand champion of the 4-H livestock show.

FACES AT THE FAIR

Kelly Gibbs, Olsburg, models the outfit which helped her win the 4-H Style Revue.

LICKTEIG
ANGUS
SCOTT

Scott Lickteig, Lawrence, was the high individual scorer in the Kansas State Fair's 4-H livestock judging contest.

For the third time in four years, Julie Beemer of Abilene was the winner in the 4-H horticulture judging contest.

1978 Master Farmers—Master Homemakers

Operators of a 260-acre diversified crop and livestock farm northeast of Erie are Joseph R. and Helen Pillot. Joe remodeled their home, milked cows, managed an elevator and carpentered, along with farming. They are the parents of five children.

Donald and Clara Mae Riffel farm near Stockton. With son, Steven, they operate on a land base of 4,066 acres, both rented and deeded land. Approximately 2,650 acres are under cultivation, growing wheat, grain sorghum and alfalfa. They have a 140-head cow-calf operation and produce market hogs.

Kenneth and Myrtle Frownfelter farm in the wide open spaces of the Elkhart-Manter area in Morton County. The Frownfelters cultivate between 2,500 and 3,000 acres, raising wheat, grain sorghum and dry sorghum for feed. They winter between 100 and 225 stockers and run a cow-calf herd.

Richard and Alice Evans, KSU graduates who farm 2,200 acres in Reno County, have hard work to thank for the success of their operation. They cultivate 1,640 acres, in wheat, grain sorghum, alfalfa and milo, and have 587 acres in pasture. They have a cow herd of 150.

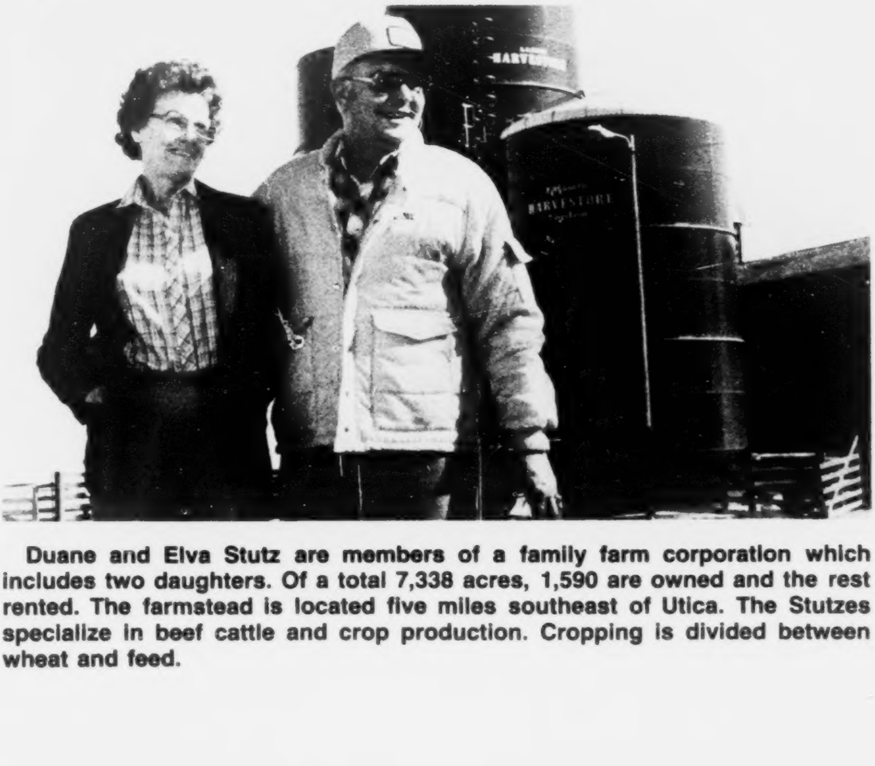
Marlin and Ione Toll, McPherson County, met at a 4-H calf show. Married now more than 34 years, they operate a 900-acre farm southwest of Lindsborg. With son, Tom, they grow wheat on 330 acres. They are the parents of four.

A former jet engine mechanic, William Strauss started farming in Geary County after his discharge from the Air Force. He and his wife, Lois, operate a 1,359-acre farm south of Junction City. They are the parents of three children, with two sons also in farming.

1980 Master Class Named

Kenton and Ruth Rife are believers in family farming—they attribute the success of the 480-acre operation near Oswego to family cooperation and the help of their three sons. Former dairy farmers, they now raise beef cattle. They grow corn, oats, wheat and soybeans, both as cash crops and feed for cattle.

Teaching in a Kansas City, Kan., high school gave the John and Carolyn Wise family the income necessary to begin farming near Linwood in 1956. They operate a 1,560-acre diversified farm in partnership with their son, Scott; 240 acres owned and 1,361 rented.



Duane and Elva Stutz are members of a family farm corporation which includes two daughters. Of a total 7,338 acres, 1,590 are owned and the rest rented. The farmstead is located five miles southeast of Utica. The Stutzes specialize in beef cattle and crop production. Cropping is divided between wheat and feed.

Five years experience as a county Extension agent helped Paul Nelson when he began farming in 1941. He and his wife Madeline farm 2,340 acres northwest of McPherson in partnership with their son Armin. They raise beef cattle, hogs, wheat and corn on both rented and owned ground. The couple are the parents of three children.

Married in 1948, Marvin and Floris Jean Hampton started farming on rented land. They purchased their first 80 acres in 1951 and in the years since have expanded their holdings to their present 3,700-acre Eagle Bluff Ranch near Dodge City. They raise grain and beef cattle in partnership with sons, Van and Wade. They are the parents of five children.

Harold and Eileen Frasier specialize in wheat and beef cattle production on their 3,120 acre farm southeast of Sharon Springs. They farm in partnership with son, Duane, and son-in-law, Bob Marshall. They feed 100-200 head of steers and calve about 140 cows a year. They grow wheat, milo and corn.

Pork Producers Remain Active

The Pork All-American award went to Stan Grecian, pictured with his wife, Patty. The Grecians farm near Palco, producing purebred Landrace and Duroc breeding stock and F-1 crossbred gilts in a purebred and commercial swine operation. Stan is a former president of the KPPC.

KPPC officers, left to right, are Vyrl Fegel, president; Fred Germann, vice president; Doyle Talkington, executive vice president; and Donovan Claasen, treasurer.

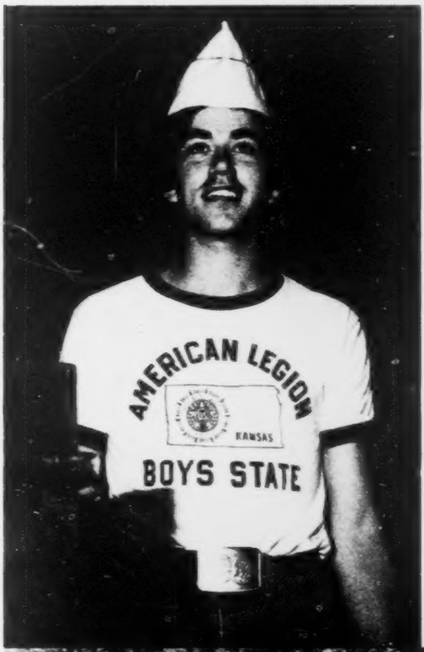
Cheri Schwartz, the 1980 Pork Queen, was crowned Feb. 6. The daughter of Leo and Sharon Schwartz, Washington, she is an agricultural economics student at Kansas State University.

Officers of the Porkettes, pictured left to right, are Shirley Sailors, president; Kay Schmidt, vice president; Roberta Harms, secretary-treasurer; and Joanna Proffit, national director.

Wineinger Tops Orators

Marion High School student Ron Wineinger defeated FFA orators from all over the nation when he took first prize at the annual national Future Farmers of America Extemporaneous Speaking Contest in Kansas City in November.

Ron's topic, for which he earned a $300 prize, was effective management in agribusiness. A member of the Marion-Florence FFA chapter, he has won all three FFA state speech events and served as president of the South Central Kansas District.



During the summer, Ron was elected the 1980-81 Governor of the Kansas American Legion Boy's State. It was one of the first times in recent years a small town, rural representative had successfully campaigned for the governor's position.

In high school, Ron served as president of his freshman and junior classes and maintained a 4.0 grade point average. He also is active in 4-H and a number of other activities.

In January 1980, Ron was one of the featured speakers at the annual banquet of the Kansas State Board of Agriculture in Topeka.

Officers of the Kansas Future Farmers of America, pictured left to right, are J. P. Worcester, Hill City, state reporter; Loy James, Clay Center, state sentinal; Phil Huston, Haven, state secretary; Randy Reinhardt, Erie, state president; John Gilliam, Washington, state vice president; and Joe Neumann, Troy, state treasurer.

Howard R. Bradley is congratulated as he is named winner of the FFA Alumni Outstanding Achievement Award. Bradley has served vocational agriculture for 49 years. He taught in Kansas for 21 years before becoming an agriculture teacher educator at Kansas State University. When he retired in 1977, he became Kansas FFA Alumni Executive Secretary. He resides in Manhattan.

Tonnie Lee Thurow, 1979-80 FFA Queen, was crowned during the Kansas State Fair in Hutchinson. A member of the Hugoton FFA Chapter, she is the daughter of Carl and Lynda Thurow.

Honored at the Future Farmers of America annual convention in Kansas City was Kevin Robinson. Kevin won the National Diversified Livestock Production Proficiency Award.

FARM FACTS

KANSAS CROP AND LIVESTOCK INFORMATION FOR 1979 AND PRELIMINARY ESTIMATES FOR 1980

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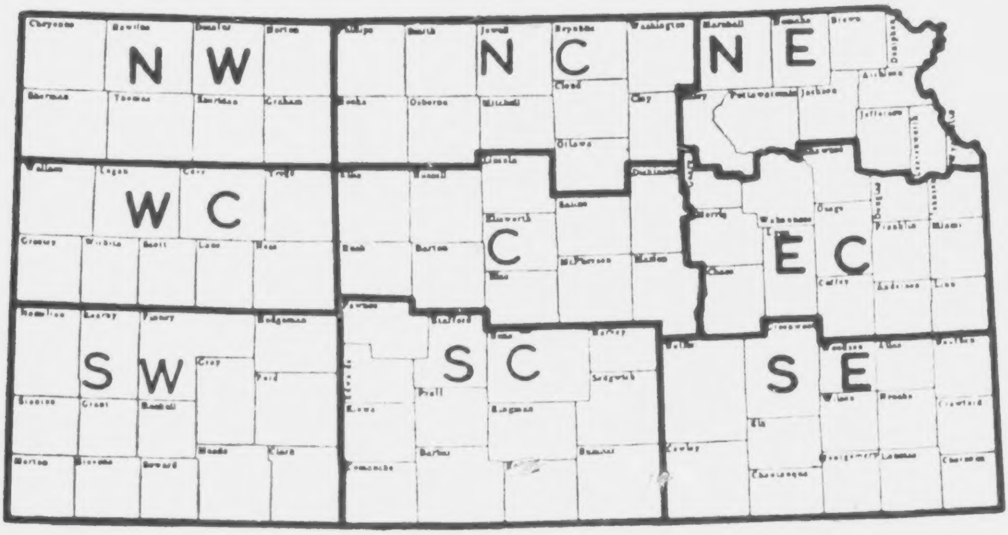
Statistical Division offices are located in Room 290, Federal Building, Topeka, Kansas 66683.

Members of the staff include: M. E. Johnson, State Statistician; William H. Kastens, Assistant State Statistician; Robert L. Vossen, Charles L. Ruckman, Phillip L. Doctor, G. Eric Waldhaus, John W. Corby, Herbert L. Vanderberry, Agricultural Statisticians; Theresa E. Holland, Dennis L. Clason, Mathematical Statisticians; William L. Brooks, Systems Analyst; Melvin E. Perott, Programmer; Marcella Melton, Editor.

The Kansas Crop and Livestock Reporting Service wishes to thank the many thousands of farmers and business firms whose faithful service as reporters make this publication possible.

CROP REPORTING DISTRICTS



Kansas is divided into nine crop reporting districts for convenience in compiling and presenting statistical information on crops and livestock. These nine districts are outlined on the above map. The districts are designated as follows: northwest (NW), west central (WC), southwest (SW), north central (NC), central (C), south central (SC), northeast (NE), east central (EC), and southeast (SE). In tables showing statistical information by counties in this bulletin, counties within each district are grouped together in alphabetical order. Totals and averages are shown for each district.

FARM NUMBERS, ACRES, VALUE, RENTS AND TAXES

Year	Number of Farms	Acres in Farms	Cropland				Pasture		Taxes Levied Per Acre
			Value per acre		Rent per acre				
			Irrigated	Non Irrigated	Irrigated	Non Irrigated	Value	Rent	
	(000)	(000)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)	(dollars)
1976	78	48,600	715	377	59.10	23.30	234	8.60	2.50
1977	77	48,400	775	412	57.50	24.80	258	9.10	2.64
1978	76	48,300	696	458	51.70	25.40	266	9.60	2.67
1979	75	48,300	801	514	58.80	27.90	306	11.60	2.62
1980	75	48,300	850	586	60.90	30.60	351	12.40	N/A
1981	74	48,300	923	641	64.00	31.70	372	12.60	N/A

AGRICULTURE REVIEW

BY W. H. KASTENS

CROP PRODUCTION ERRATIC

A record, bin-busting wheat crop of 420 million bushels was harvested in 1980, up two percent from the previous record set in 1979. The value of the wheat crop, at $1.62 billion, was up six percent from 1979 and nearly double the 1978 value. Sorghum grain production totaled 156.5 million bushels, 36 percent below the record harvested in 1979. Value of the sorghum grain crop was $460 million, down 15 percent. Drought conditions caused Kansas to drop to second place behind Texas in sorghum production. A corn crop of 116.6 million bushels was harvested, 32 percent less than the record of 1979 and the smallest crop since 1970. The value of corn production totaled $396 million, eight percent below 1979. Soybean production totaled 23.9 million bushels, 42 percent below 1979 and the smallest crop since 1976. The soybean value of $182 million was 26 percent below 1979. Production of all hay during 1980 totaled 4.23 million tons, down 28 percent from 1979 and the smallest crop since 1974. The crop was valued at $256 million, down ten percent.

LIVESTOCK RECEIPTS DOWN

Kansas farmers and ranchers received five percent less during 1980 than the previous year for the marketings of all livestock and livestock products. The January 1, 1981 inventory of cattle and calves was placed at 6.45 million head, four percent greater than the previous year. Beef cows, with an increase of eleven percent, were responsible for a large part of the increased inventory. Calves born during 1980 totaled 1.85 million head, up ten percent. The value of the total cattle and calf inventory amounted to $2.6 billion, a decrease of seven percent from the previous year.

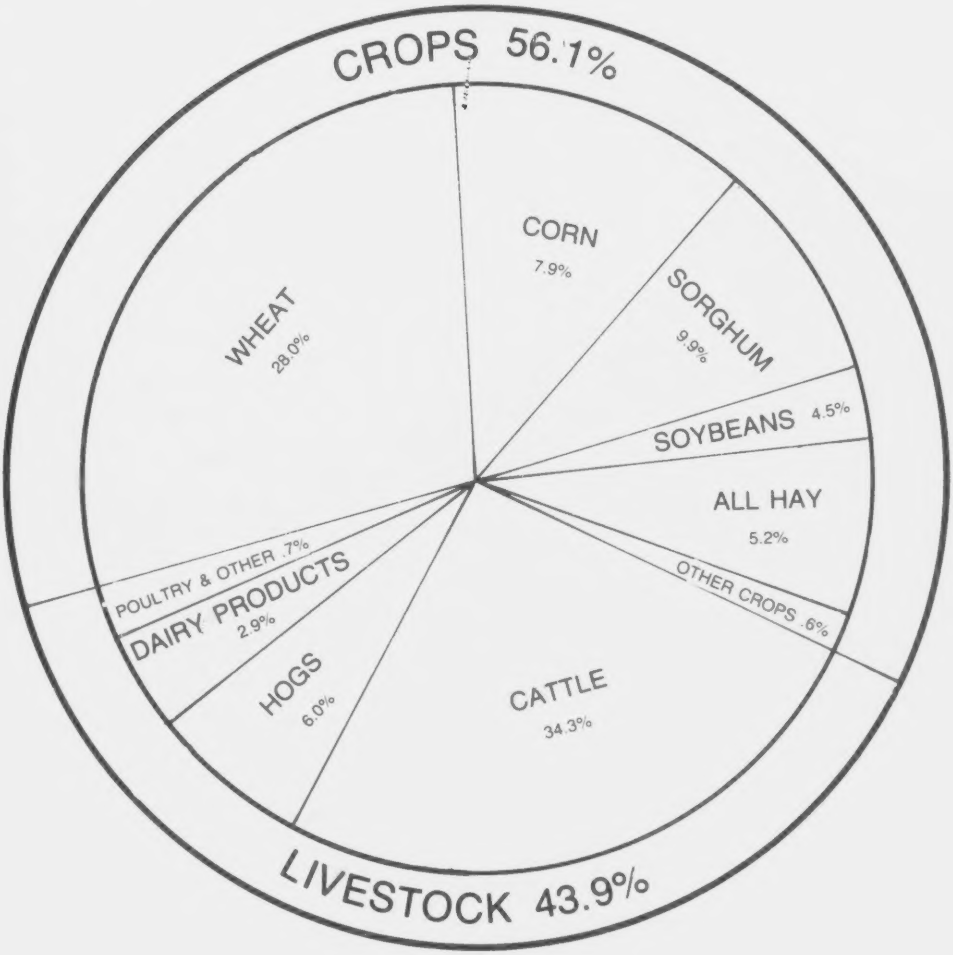
The December 1, 1980 inventory of hogs and pigs totaled 1.90 million head, nine percent below the previous year. Extremely high temperatures during the summer and early fall months reduced conception rates and producers' intentions to farrow fell short during the latter months of 1980 and early months of 1981. The value of the December 1 inventory was $123.5 million, up 16 percent from the previous year.

Sheep and lambs on Kansas farms and ranches January 1, 1981 totaled 200,000 head, 15 percent below the previous year's inventory, first decline after four years of expanding flocks. The value of the January 1 sheep and lamb inventory was $12.5 million, 24 percent below the previous year.

EXPORTS INCREASE—CASH RECEIPTS STEADY

During fiscal year 1980 (October 1, 1979-September 30, 1980) Kansas was the fifth leading exporter of agricultural commodities among the 50 states. Value of the state's agricultural exports was a record high $2.2 billion, an increase of 41 percent over the previous year. Kansas' exports were five percent of the national total. Cash receipts from marketings of farm commodities during 1980 totaled $5.94 billion, an increase of less than one percent. Crop marketings of $2.6 billion increased ten percent over 1979 and represented 43.5 percent of total marketings. In 1979 Kansas farmers had a net farm income exceeding one billion dollars for the first time since 1973. With continued increases in farm production expenses and some decline in government payments, the final 1980 net farm income probably will be little more than half of that achieved in 1979.

VALUE OF PRODUCTION
1979



PERCENT OF VALUE OF PRODUCTION

Year	Crops						Livestock and their products				Total Crops and Livestock
	Wheat	Corn Grain	Sorghum Grain	Soybeans	All Hay	Other Crops	Cattle	Hogs	Dairy Products	Poultry Eggs & Other Livestock	
	Percent of total										
1971	20.2	6.8	10.9	2.6	6.2	1.5	38.7	7.1	4.9	1.1	100.0
1972	19.8	7.4	11.3	3.7	5.5	.9	39.3	7.6	3.7	.8	100.0
1973	33.0	8.7	10.7	3.4	5.1	.9	28.4	6.6	2.4	.8	100.0
1974	33.3	10.7	9.6	3.4	5.3	1.4	25.4	7.0	3.1	.8	100.0
1975	35.3	10.4	9.8	3.2	6.9	1.3	21.1	7.6	3.6	.8	100.0
1976	26.9	11.2	9.4	2.6	7.6	1.4	27.2	8.6	4.2	.9	100.0
1977	23.2	9.6	12.3	4.7	7.0	1.1	28.3	8.8	4.1	.9	100.0
1978	22.3	9.2	10.1	4.6	5.4	.9	34.8	8.1	3.8	.8	100.0
1979	28.0	7.9	9.9	4.5	5.2	.6	34.3	6.0	2.9	.7	100.0

KANSAS' RANK IN U. S. AGRICULTURE—1980

Crop or Livestock Item	Production or number		Rank	% of U.S. Produced on Kansas Farms
Wheat (all) produced	420,000,000	bu.	1	17.7
Sorghum silage produced	2,745,000	tons	1	38.6
Commercial grain storage capacity January 1, 1981	848,000,000	bu.	1	11.8
Sorghum grain produced	156,520,000	bu.	2	26.6
Flour milled	32,785,000	cwt.	2	11.6
Motor trucks on farms	157,500	number	2	5.2
Cropland [1]	30,019,593	acres	2	6.5
Grain drills on farms	67,200	number	2	6.5
Dehydrated alfalfa processed	146,800	tons	2	—
Combines on farms	40,200	number	3	7.6
Land in farms	48,300,000	acres	3	4.6
Lespedeza seed produced	650,000	lbs.	3	12.1
All cattle and calves produced	2,776,030,000	lbs.	4	6.9
Cattle and calves on grain feed January 1, 1981	1,100,000	head	4	9.9
All cattle and calves on farms January 1, 1981	6,450,000	head	4	5.6
Red meat production by commercial slaughter plants	2,251,699,000	lbs.	4	5.8
Tall fescue seed	2,550,000	lbs.	5	3.2
Exports of farm products	2,214,900,000	dollars	5	5.5
Alfalfa seed produced	6,400,000	lbs.	6	6.3
Cash receipts from farm marketing	5,941,100,000	dollars	7	4.3
Sheep and lambs on feed January 1, 1981	60,000	head	8	3.7
Hogs produced	777,883,000	lbs.	8	3.3
Corn silage produced	3,834,000	tons	8	3.5
Popcorn produced	8,990,000	lbs.	9	1.7
Alfalfa hay produced	2,850,000	tons	10	3.6
Hogs on farms December 1, 1980	1,900,000	head	10	2.9
All hay produced	4,230,000	tons	10	3.2
Wheel and crawler tractors on farms	149,300	number	10	3.5
Corn grain produced	116,560,000	bu.	11	1.8
Field forage harvesters on farms	11,400	number	11	3.4
Dry edible beans	336,000	cwt.	11	1.3
All other hay (all excluding alfalfa)	1,380,000	tons	13	2.7
Sugar beets produced	202,000	tons	13T	.9
Red clover seed produced	450,000	lbs.	14	1.8
All sheep and lambs produced	14,089,000	lbs.	16	1.9
Soybeans produced	23,925,000	bu.	17	1.3
All sheep and lambs on farms January 1, 1981	200,000	head	17	1.5
Barley produced	2,419,000	bu.	17	.7
Rye produced	210,000	bu.	19	1.3
Milk produced	1,355,000,000	lbs.	24	1.1
Farm chickens produced	6,952,000	lbs.	31	.6
Eggs produced	427,000,000	number	32	.6

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[1] Total cropland, 1978 U. S. Census of Agriculture.

LEADING STATES FOR AGRICULTURAL EXPORT SHARES, FISCAL YEAR 1980

Commodity	United States	Leading 6 States in Export Dollars					
		1	2	3	4	5	6
		Million Dollars					
All commodities	40,480.5	Ill. 3,643.7	Iowa 3,270.3	Calif. 3,168.2	Texas 3,086.2	Kansas 2,214.9	Minn. 2,003.6
Feed grains and products	9,628.1	Ill. 1,689.7	Iowa 1,627.3	Neb. 1,120.5	Ind. 779.2	Minn. 603.8	Texas 524.1
Soybeans and products	8,587.8	Ill 1,422.6	Iowa 1,180.2	Mo. 707.2	Minn. 631.0	Ind. 603.7	Ohio 549.3
Wheat and products	6,632.7	Kansas 1,230.0	N. D. 873.2	Okla. 649.2	Texas 413.6	Mont. 370.3	Wash. 360.7
Cotton, including linters	3,033.3	Texas 1,166.8	Calif. 689.4	Miss. 295.7	Ariz. 289.6	La. 140.8	Ark. 124.4
Tobacco	1,348.6	N.C. 663.9	Ky. 185.1	S.C. 126.5	Va. 110.5	Ga. 108.5	Tenn. 60.0
Fruits and preparations	1,299.7	Calif. 712.5	Fla. 284.3	Wash. 67.7	Ariz. 33.0	Texas 27.6	Mich. 26.1
Rice	1,170.2	Ark. 420.4	Calif. 288.2	Texas 201.2	La. 177.2	Miss. 71.8	Mo. 11.4
Hides and skins	1,115.3	Wis. 127.8	Texas 99.9	Minn. 74.4	Iowa 62.3	Neb. 52.7	Utah 51.3
Vegatables and preparations	954.2	Calif. 207.3	Wash. 129.8	Mich. 116.7	Idaho 113.0	Fla. 67.1	Neb. 40.7
Meats and products	870.7	Iowa 95.3	Texas 88.1	Neb. 61.0	Kansas 50.7	Mo. 47.8	Ill. 41.8
Lard and tallow	784.4	Texas 100.6	Neb. 55.7	Iowa 54.2	Kansas 51.7	Okla. 41.7	Mo. 39.5
Nuts and preparations	587.2	Calif. 572.7	Ore. 7.3	Texas 2.5	Ga. 2.0	La. .8	Okla. .6
Poultry and products	546.5	Ark. 70.0	Ga. 63.0	Ala. 50.2	N.C. 47.0	Calif. 38.1	Miss. 28.4
Sunflower seeds	506.4	N.D. 318.4	Minn. 129.7	S.D. 52.4	Texas 5.9		
Peanuts and peanut oil	278.8	Ga. 119.7	Ala. 42.1	Texas 36.3	N.C. 26.2	Okla. 18.9	Va. 18.1
Cottonseed oil	212.8	Texas 80.5	Calif. 51.1	Ariz. 20.6	Miss. 20.0	La. 9.5	Ark. 8.4
Dairy products	156.3	Wis. 40.5	Minn. 28.3	Calif. 22.2	N.Y. 14.1	Iowa 11.9	Ohio 10.0

INDEX OF KANSAS CROP AND LIVESTOCK PRODUCTION, 1959-1980

1971-1973 Average = 100

Year	Index		Year	Index	
	Crops	Livestock *		Crops	Livestock *
1959	63	62	1970	76	92
1960	79	60	1971	96	98
1961	69	67	1972	96	105
1962	64	69	1973	108	98
1963	61	76	1974	82	97
1964	56	81	1975	90	83
1965	69	70	1976	92	90
1966	63	80	1977	106	95
1967	69	84	1978	92	90
1968	76	83	1979	119	94
1969	86	86	1980	97	97

*Includes dairy and poultry production.

FARM, CROP AND LIVESTOCK INFORMATION, 1980

County	Number of Farms	Total Land in Farms, (000) acres	Total acres harvested	Total Value of field crops,[1] dollars	Total Value of livestock and poultry produced,[2] dollars
Northwest District:					
Cheyenne	540	635	209,525	37,456,530	8,661,500
Decatur	540	555	189,280	29,714,110	14,371,800
Graham	490	560	178,530	23,754,850	9,889,000
Norton	540	521	179,900	25,813,180	12,087,800
Rawlins	590	670	204,200	32,997,130	12,525,700
Sheridan	550	544	214,220	44,206,174	21,267,700
Sherman	540	651	292,370	55,561,210	12,661,800
Thomas	610	689	345,625	69,390,110	12,809,900
District total	4,400	4,825	1,813,650	318,893,294	104,275,200
West Central District:					
Gove	505	627	203,420	32,856,130	24,824,900
Greeley	305	487	202,320	27,459,030	23,821,300
Lane	330	462	185,230	26,718,450	57,651,000
Logan	405	648	203,230	29,760,770	16,499,500
Ness	630	666	222,510	32,538,130	18,230,200
Scott	405	454	227,060	40,181,270	72,654,300
Trego	520	512	172,590	22,612,240	14,732,100
Wallace	310	514	148,420	26,174,110	7,445,800
Wichita	340	445	211,720	40,154,170	38,243,300
District total	3,750	4,815	1,776,500	278,454,300	274,102,400
Southwest District:					
Clark	325	614	107,710	10,816,120	17,732,200
Finney	570	759	486,030	107,468,870	80,211,100
Ford	820	694	310,510	47,432,610	83,237,700
Grant	290	365	223,340	46,237,410	35,498,100
Gray	550	530	325,130	74,330,850	37,657,700
Hamilton	295	569	235,300	30,564,600	13,278,600
Haskell	345	387	269,770	73,413,260	60,473,700
Hodgeman	480	510	160,170	23,161,810	26,707,900
Kearny	280	520	236,370	42,084,260	23,178,000
Meade	475	619	243,290	43,109,510	19,097,900
Morton	245	443	223,030	29,253,960	9,548,500
Seward	280	345	205,530	35,113,310	35,807,900
Stanton	245	470	254,350	48,229,190	15,792,800
Stevens	350	455	333,720	50,105,240	11,156,600
District total	5,550	7,280	3,614,250	661,321,000	469,378,700
North Central District:					
Clay	780	380	200,140	22,647,610	21,036,300
Cloud	800	420	227,840	29,661,810	10,387,700
Jewell	820	520	239,540	37,027,340	22,277,700
Mitchell	695	467	242,150	34,237,580	17,406,300
Osborne	705	555	207,840	28,701,940	16,402,800
Ottawa	625	422	192,950	24,069,880	15,943,900
Phillips	715	562	195,470	29,659,440	20,601,500
Republic	980	432	278,400	41,481,490	26,085,200
Rooks	560	553	184,980	24,986,040	15,108,200
Smith	825	551	239,350	41,983,830	21,262,200
Washington	1,145	538	294,540	32,706,540	34,617,000
District total	8,650	5,400	2,502,200	347,163,500	221,128,800
Central District:					
Barton	1,045	587	336,050	44,551,850	31,530,100
Dickinson	1,190	541	307,630	33,675,780	30,670,900
Ellis	775	540	172,310	22,450,560	21,260,800
Ellsworth	565	435	170,560	19,390,200	10,198,300
Lincoln	640	453	189,060	26,241,350	14,821,600
McPherson	1,520	560	369,220	49,832,680	26,628,100
Marion	1,240	570	322,930	29,356,820	36,461,600
Rice	710	474	301,050	41,581,120	25,142,700
Rush	625	450	196,810	27,700,450	9,245,500
Russell	630	498	185,630	23,977,890	6,518,100
Saline	760	407	200,350	25,159,200	20,017,100
District total	9,700	5,515	2,751,600	343,917,900	232,494,800

FARM, CROP AND LIVESTOCK INFORMATION, 1980—*Concluded*

County	Number of farms	Total Land in Farms, (000) acres	Total acres harvested	Total Value of field crops,[1] dollars	Total Value of livestock and poultry produced,[2] dollars
South Central District					
Barber	535	701	224,670	25,198,510	21,139,900
Comanche	300	500	129,830	12,933,030	11,010,700
Edwards	420	380	214,660	37,016,710	13,191,500
Harper	745	521	323,270	42,081,490	19,797,400
Harvey	925	325	248,690	28,972,830	21,497,400
Kingman	890	531	267,520	30,038,090	17,084,100
Kiowa	395	460	150,850	21,870,760	12,105,300
Pawnee	585	465	275,030	45,826,380	16,590,800
Pratt	570	453	260,490	34,259,320	25,019,800
Reno	1,640	731	431,630	53,413,560	34,933,500
Sedgwick	1,600	552	394,230	51,464,990	34,263,900
Stafford	595	460	267,150	42,150,870	19,627,900
Sumner	1,400	721	539,180	66,134,560	17,758,300
District total	10,600	6,800	3,727,200	491,361,100	264,020,500
Northeast District:					
Atchison	770	242	150,710	24,307,520	16,293,000
Brown	900	344	256,090	40,992,630	22,488,700
Doniphan	670	229	156,610	37,092,610	12,460,600
Jackson	1,135	372	145,620	17,394,240	19,563,900
Jefferson	1,040	278	147,590	20,098,110	18,735,100
Leavenworth	1,135	213	115,710	17,530,510	17,152,400
Marshall	1,225	550	334,080	39,452,120	29,239,200
Nemaha	1,125	415	245,550	30,267,270	41,066,500
Pottawatomie	890	456	159,630	20,943,550	29,591,500
Riley	570	256	109,320	11,918,090	14,422,900
Wyandotte	240	30	12,440	1,840,550	1,618,600
District total	9,700	3,385	1,833,350	261,837,200	222,632,400
East Central District					
Anderson	755	369	174,990	15,906,400	18,584,100
Chase	320	423	69,850	7,098,890	15,209,300
Coffey	695	360	196,080	14,926,800	15,871,100
Douglas	855	236	125,300	15,223,920	16,834,100
Franklin	1,135	310	158,920	17,867,160	19,310,500
Geary	305	168	60,490	7,475,030	10,011,200
Johnson	795	174	82,870	11,868,030	9,298,700
Linn	785	309	130,260	11,051,150	15,416,900
Lyon	960	480	172,570	16,862,330	33,934,500
Miami	1,200	308	139,230	16,720,990	17,585,500
Morris	630	416	154,480	15,251,020	23,560,200
Osage	920	376	190,340	21,827,840	13,068,600
Shawnee	855	225	122,250	15,941,830	9,076,900
Wabaunsee	690	436	100,470	9,630,010	22,677,300
District total	10,900	4,590	1,878,100	197,651,400	240,438,900
Southeast District:					
Allen	790	299	155,900	14,210,620	14,862,600
Bourbon	935	354	130,050	9,595,840	25,366,100
Butler	1,315	748	251,190	23,829,500	37,757,000
Chautauqua	475	355	45,760	4,952,890	12,733,600
Cherokee	890	299	225,360	25,396,350	8,463,300
Cowley	1,100	675	223,280	31,621,140	31,651,700
Crawford	980	310	168,490	14,330,580	14,721,500
Elk	465	351	72,350	5,758,770	13,075,900
Greenwood	675	647	101,290	8,867,560	27,233,700
Labette	1,125	368	189,140	19,790,320	25,591,800
Montgomery	1,020	330	140,380	15,587,590	14,880,200
Neosho	840	315	144,570	13,013,770	19,824,400
Wilson	680	325	149,650	14,661,010	14,731,200
Woodson	460	314	100,290	8,023,460	14,228,300
District total	11,750	5,690	2,097,700	209,639,400	275,121,300
State	75,000	48,300	21,994,550	3,110,239,094	2,303,593,000

1. Excluding estimates of seed crops which are not made currently on a county basis. Does not include any Government Program Payments.

2. Includes meat animals, chickens, eggs, turkeys, wool, milk, honey, and beeswax.

KANSAS AGRIBUSINESS

BY DENNIS CLASON

GRAIN, HAY AND OILSEED PROCESSING

Flour production in 1980 was 32.8 million sacks, down 8 percent from the previous year. The value of the flour was $331.7 million, a slight decrease from 1979. Millfeed production for 1980 was 563,902 tons, valued at $57.9 million. The farm value of the 72.2 million bushels of wheat ground into flour during 1980 was $278.0 million. Kansas soybean crushers produced 435.6 million pounds of oil and 972,500 tons of meal in 1980. Oil production was down 3 percent while meal production was up slightly from 1979. Combined value of meal and oil was $321.2 million, or 4 percent above 1979. Dehydrated alfalfa meal production totaled 146,800 tons, 13 percent below 1979. Sun-cured alfalfa meal production was up 28 percent from 1979.

COMMERCIAL FEED PRODUCTION

Total 1980 sales of commercially prepared feeds were 2.5 million tons, a 3 percent increase from 1979, despite the loss of 38 registered feed manufacturers. Value of the feeds was $518.3 million, 12 percent above 1979. Combined production of commercial and customer formula feeds was up slightly, at 3.3 million tons.

FERTILIZER

Fertilizer use in Kansas was down during the Fall of 1980, but total use during FY 1980 was up 4 percent from 1979 to 1,637,150 tons. Nitrogen application was up 6 percent to 640,022 tons, phosphoric acid use increased 3 percent to 205,632 tons, and 64,197 tons of potash were applied in FY 1980, up 25 percent from 1979.

FLOUR AND MILL FEED PRODUCTION, 1971-80

Year	Number of plants	Wheat ground (000 bushels)	Flour produced		Mill feed produced	
			Quantity (000 sacks)	Value (000 dollars)	Quantity (tons)	Value (000 dollars)
1971	21	76,174	34,815	189,602	595,337	25,909
1972	21	74,652	33,947	199,167	583,888	27,513
1973	21	73,662	33,443	282,727	578,564	45,938
1974	21	67,343	30,681	339,301	549,190	50,141
1975	21	67,150	30,497	285,604	564,195	46,603
1976	22	80,481	36,037	299,215	630,648	56,317
1977	27	78,524	35,769	223,413	633,111	48,560
1978	24	76,843	34,731	259,336	607,793	45,341
1979	20	79,237	35,818	331,961	623,233	56,278
1980	19	72,210	32,785	331,653	563,902	57,856

SOYBEAN OIL AND MEAL PRODUCTION, 1972-80*

Year	Number of plants	Soybean oil (000 pounds)	Soybean meal (tons)	Combined value (000 dollars)
1972	4	345,873	784,132	118,958
1973	4	377,042	811,774	268,148
1974	4	377,359	836,179	252,871
1975	4	352,078	797,548	188,364
1976	4	387,098	857,485	212,175
1977	4	315,146	656,225	201,112
1978	4	401,450	875,629	252,660
1979	4	448,586	965,402	308,418
1980	4	435,554	972,470	321,161

* Includes some beans shipped in from other states.

ALFALFA MEAL, 1973-80

	Dehydrated alfalfa meal 1973-80			Sun-cured alfalfa meal 1973-80	
Year *	Number of drums	Production (tons)	Value (000 dollars)	Production (tons)	Value (000 dollars)
1973-74	69	195,800	15,243	35,100	2,601
1974-75	68	165,900	13,139	29,400	2,242
1975-76	64	164,100	12,882	27,400	2,137
1976-77	64	174,000	16,460	33,200	3,081
1977-78	60	187,800	14,564	94,100	6,418
1978-79	56	155,900	12,168	95,500	7,396
1979-80	56	169,200	17,157	94,100	8,577
1980-81	54	146,800	15,590	120,500	12,725

* Crop year, May-April

COMMERCIAL FEEDS, 1972-80

Year	Number of feed manufacturers registered	Commercial feeds sold*		Customer formula feeds** (000 tons)	Total commercial and customer formula feeds (000 tons)
		Quantity (000 tons)	Value (000 dollars)		
1972	881	1,949	192,171	925	2,874
1973	876	1,939	314,118	902	2,841
1974	873	2,078	344,948	761	2,839
1975	826	1,764	276,948	670	2,434
1976	792	2,287	384,216	742	3,029
1977	755	1,822	326,138	733	2,555
1978	759	2,213	376,210	809	3,022
1979	783	2,397	462,621	888	3,285
1980	745	2,480	518,320	819	3,299

* Commercial feeds include manufactured formula feeds and feed ingredients.
** Feeds or feed mixture prepared to an individual customer's specified formula.

FOREST, GREENHOUSE AND NURSERY PRODUCTS, 1972-80

Year	Forest products (dollars)	Greenhouse & Nursery products (dollars)
1972	800,000	8,800,000
1973	1,000,000	9,100,000
1974	2,000,000	11,500,000
1975	1,800,000	12,900,000
1976	1,500,000	15,000,000
1977	2,000,000	16,000,000
1978	2,200,000	18,000,000
1979	2,500,000	20,000,000
1980	2,500,000	20,000,000

COMMERCIAL FERTILIZER SOLD IN KANSAS [1]

Available Plant Nutrients Sold, 1973-80

	Nitrogen	Available Phosphoric Acid	Potash	Total
	— Tons —			
Fall, 1973	265,529	101,349	27,345	394,223
Spring, 1974	294,067	76,460	34,355	404,882
Total, 1973-74	559,596	177,809	61,700	799,105
Fall, 1974	280,235	127,536	23,550	431,321
Spring, 1975	270,623	64,179	21,768	356,570
Total, 1974-75	550,858	191,715	45,318	787,891
Fall, 1975	291,879	113,923	19,284	425,086
Spring, 1976	354,389	85,000	27,688	467,077
Total, 1975-76	646,268	198,923	46,972	892,163
Fall, 1976	270,963	115,001	24,294	410,258
Spring, 1977	367,613	75,175	29,564	472,352
Total, 1976-77	638,576	190,176	53,858	882,610
Fall, 1977	221,952	75,071	14,156	311,179
Spring, 1978	376,529	85,893	29,137	491,559
Total, 1977-78	598,481	160,964	43,293	802,738
Fall, 1978	273,144	104,182	21,502	398,828
Spring, 1979	332,138	95,287	29,934	457,359
Total, 1978-79	605,282	199,469	51,436	856,187
Fall, 1979	336,231	132,488	37,872	506,591
Spring, 1980	303,791	73,144	26,325	403,260
Total, 1979-80	640,022	205,632	64,197	909,851

TOTAL FERTILIZER SOLD IN KANSAS, 1950-80

Fiscal year (July 1-June 30)	Fall	Spring	Total
	— Tons —		
1950-51	103,312	77,457	180,769
1955-56	115,282	87,885	203,167
1960-61	207,637	198,316	405,953
1961-62	216,687	261,841	478,528
1962-63	261,885	326,724	588,609
1963-64	298,407	311,756	610,163
1964-65	304,897	336,020	640,917
1965-66	347,185	487,631	834,816
1966-67	412,185	478,678	890,863
1967-68	414,311	658,571	1,072,882
1968-69	445,799	640,524	1,086,323
1969-70	457,362	771,721	1,229,083
1970-71	435,431	732,158	1,167,589
1971-72	483,734	761,226	1,244,960
1972-73	513,584	856,502	1,370,086
1973-74	708,712	820,456	1,529,168
1974-75	745,236	716,329	1,461,565
1975-76	721,369	905,326	1,626,695
1976-77	704,346	932,896	1,637,242
1977-78	544,958	861,252	1,406,210
1978-79	672,009	906,341	1,578,350
1979-80	858,105	779,045	1,637,150
1980	830,065		

[1] Compiled by Kansas Department of Agriculture, Control Division.

CROPS

BY ROBERT L. VOSSEN

Record wheat production in 1980 was followed by sharply reduced crops of sorghum grain, corn, and soybeans. The roughage crops of hay and silage were also below year earlier levels. Acreages of wheat, sorghum grain, oats, and barley registered increases over 1979 along with increases for popcorn, sugar beets, alfalfa seed, red clover seed, and dry beans. Acreages of corn, soybeans, and rye as well as lespedeza seed and tall fescue seed were below the previous year. The total crop acreage harvested in 1980 was 22.1 million acres, compared with 20.9 million acres in 1979. Yields of all estimated crops were below year earlier levels except dry edible beans and red clover seed. Moisture was below normal for all areas of the State during the 1980 growing season. Shortages ranged from 10 to 20 percent below normal in the western areas to nearly 60 percent below normal in the drought-stricken southeast. The wheat crop had adequate moisture and moderate temperatures during April and May to grow and develop and was largely matured before the drought took effect. Intense heat and generally dry weather starting in late June and continuing through most of August depleted moisture supplies. Dryland crops, particularly in the eastern districts, deteriorated rapidly. Poor pollination because of hot, dry weather affected both dryland and irrigated crops. Many fields of dryland corn, sorghum, and soybeans were cut for silage, baled or plowed under because of poor grain or bean prospects. Insect problems were chiefly chinch bug, corn earworms, and grasshoppers. Chinch bugs took a heavy toll in the north central sorghum fields.

WHEAT

Kansas farmers produced a record 420.0 million bushels in 1980, 2 percent above the previous record of 1979. The 1980 crop was seeded on 13.0 million acres with 12.0 million acres harvested for grain, an 11 percent increase from 1979. The average yield of 35.0 bushels per acre was 3 bushels below the 1979 record of 38.0 bushels per acre.

SORGHUM

Sorghum grain production of 156.5 million bushels was 36 percent below the record 246.3 million bushels in 1979. Acreage harvested for all purposes, at 4.40 million acres, was 3 percent above a year earlier. Sorghum acreage cut for grain totaled 3.64 million acres, 2 percent above 1979. Sorghum grain yield, at 43.0 bushels per acre, was 26 bushels below the prevous year's crop average and was the lowest since 1975.

CORN

Kansas farmers produced a corn crop of 116.6 million bushels, 32 percent below the modern day record corn crop of 172.0 million bushels in 1979 and the smallest production since 1970. The State yield of 94.0 bushels per harvested acre was 23 bushels below the 1979 corn yield and the lowest since 86.0 bushels per acre was realized in 1975. The grain was harvested from 1.24 million acres, compared with 1.47 million acres harvested a year earlier. White corn production of 1.2 million bushels was down from the 2.9 million bushels of a year earlier due mostly to a lower average yield per acre.

SOYBEANS

Soybean production in Kansas totaled 23.9 million bushels, 42 percent below 1979 and the smallest production since 1976. Both yield and acreage harvested were below 1979. The average yield per acre, at 16.5 bushels, was down 10 bushels from the previous year. Acreage harvested, at 1.45 million acres, was down 7 percent from a year earlier.

STATE SUMMARY, 1980

Crops		Acres planted	Acres harvested	Yield per acre	Production	Farm value, dollars
Wheat	bu.	13,000,000	12,000,000	35.0	420,000,000	1,617,000,000
All corn	bu.	1,790,000	1,713,000			
Corn, grain	bu.		1,240,000	94.0	116,560,000	396,304,000
Corn, silage	tons		426,000	9.0	3,834,000	83,965,000
Oats	bu.	175,000	120,000	38.0	4,560,000	8,664,000
Barley	bu.	69,000	59,000	41.0	2,419,000	5,685,000
Rye	bu.	60,000	10,000	21.0	210,000	504,000
All sorghums	bu.	4,700,000	4,400,000			
Sorghum, grain	bu.		3,640,000	43.0	156,520,000	460,169,000
Sorghum, silage	tons		305,000	9.0	2,745,000	52,430,000
Sorghum, forage	tons		455,000	2.6	1,183,000	41,996,000
Soybeans	bu.	1,550,000	1,450,000	16.5	23,925,000	181,830,000
Sugar beets [1]	tons	16,000	15,000	13.5	202,000	6,280,000
Popcorn	lbs.	5,500	4,200	2,140.0	8,990,000	859,000
All hay	tons		2,200,000	1.92	4,230,000	255,915,000
Alfalfa hay	tons		1,000,000	2.85	2,850,000	174,758,000
All other hay	tons		1,200,000	1.15	1,380,000	81,157,000
Alfalfa seed	lbs.		64,000	100.0	6,400,000	4,800,000
Red clover seed	lbs.		6,000	75.0	450,000	261,000
Lespedeza seed	lbs.		5,000	130.0	650,000	237,000
Tall fescue seed	lbs.		17,000	150.0	2,550,000	701,000
Apples (commercial)	lbs.				11,000,000	989,000
Peaches	lbs.				6,500,000	1,300,000
Dry edible beans	cwt.	25,000	24,000	1,400.0	336,000	9,206,000
Total of all crops			22,087,200			3,129,095,000

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1. Preliminary, price and value based on national average.

STATE SUMMARY, 1979

Crops		Acres planted	Acres harvested	Yield per acre	Production	Farm value, dollars
Wheat	bu.	12,100,000	10,800,000	38.0	410,400,000	1,526,688,000
All corn	bu.	1,750,000	1,720,000			
Corn, grain	bu.		1,470,000	117.0	171,990,000	431,695,000
Corn, silage	tons		245,000	16.0	3,920,000	78,400,000
Oats	bu.	135,000	85,000	44.0	3,740,000	6,171,000
Barley	bu.	66,000	52,000	44.0	2,288,000	4,873,000
Rye	bu.	85,000	18,000	28.0	504,000	958,000
All sorghums	bu.	4,350,000	4,290,000			
Sorghum, grain	bu.		3,570,000	69.0	246,330,000	541,926,000
Sorghum, silage	tons		320,000	12.0	3,840,000	62,976,000
Sorghum, forage	tons		400,000	3.4	1,360,000	39,440,000
Soybeans	bu.	1,580,000	1,560,000	26.5	41,340,000	246,800,000
Sugar beets	tons	13,000	12,000	17.8	213,000	6,688,000
Popcorn	lbs.	4,000	3,900	3,300.0	12,870,000	1,133,000
All hay	tons		2,300,000	2.54	5,840,000	283,240,000
Alfalfa hay	tons		1,000,000	3.50	3,500,000	183,767,000
All other hay	tons		1,300,000	1.80	2,340,000	99,473,000
Alfalfa seed	lbs.		43,000	95.0	4,085,000	3,309,000
Red clover seed	lbs.		6,000	80.0	480,000	250,000
Lespedeza seed	lbs.		10,000	230.0	2,300,000	472,000
Tall fescue seed	lbs.		27,000	225.0	6,075,000	1,094,000
Apples (commercial)	lbs.				15,000,000	1,340,000
Peaches	lbs.				5,000,000	1,250,000
Dry edible beans	cwt.	18,000	17,000	1,000.0	170,000	4,284,000
Total of all crops			20,943,900			3,242,987,000

PRECIPITATION IN KANSAS, 1980 AND AVERAGE

Inches of Water

Month	N.W.		W.C.		S.W.		N.C.		C.		S.C.		N.E.		E.C.		S.E.		State	
	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*
January	.83	.47	.84	.47	1.23	.43	1.15	.59	1.28	.62	1.57	.64	1.36	.95	1.34	1.07	.77	1.15	1.16	.70
February	.86	.53	.91	.51	.88	.52	1.05	.85	1.20	.87	1.19	.99	1.04	.98	1.14	1.08	1.35	1.24	1.08	.85
March	2.98	1.18	3.53	1.22	2.83	.96	3.37	1.54	3.52	1.53	3.76	1.46	4.09	2.05	4.57	2.30	4.68	2.28	3.69	1.59
April	2.08	1.81	1.71	1.80	2.53	1.60	1.68	2.37	1.32	2.49	1.69	2.52	1.54	3.05	.90	3.71	2.09	3.91	1.76	2.56
May	2.35	3.09	2.76	2.91	4.49	2.97	2.29	3.92	2.31	3.76	2.88	3.61	1.97	4.46	2.10	4.40	2.26	4.92	2.69	3.77
June	2.08	3.80	3.00	3.61	1.30	3.19	2.02	4.92	.80	4.61	2.45	4.27	2.96	6.00	2.54	5.77	1.20	5.48	1.97	4.54
July	2.62	3.26	1.24	3.20	1.15	2.97	.83	3.57	.95	3.66	.86	3.47	1.38	4.24	.96	4.48	.63	4.14	1.13	3.63
August	3.22	2.44	4.66	2.60	2.69	2.66	3.43	3.11	4.90	2.99	3.85	3.05	4.69	3.96	4.70	4.03	3.56	3.30	3.89	3.10
September	1.38	1.79	.71	1.67	.03	1.69	1.54	3.15	.53	3.19	.48	2.91	3.07	3.94	1.51	4.36	1.45	4.80	1.07	3.03
October	.80	1.32	.54	1.35	.18	1.46	2.16	1.78	1.65	2.16	1.16	2.25	4.06	2.65	4.26	3.03	2.30	3.00	1.78	2.11
November	.07	.61	.14	.66	.27	.61	.03	.81	.05	.90	.15	.99	.19	1.18	.53	1.39	.90	1.71	.27	.99
December	.15	.46	.26	.46	.50	.45	1.02	.69	1.69	.85	1.34	.95	3.66	1.19	2.53	1.42	1.85	1.39	1.37	.87
Annual	19.42	20.76	20.30	20.46	18.08	19.51	20.57	27.30	20.20	27.63	21.38	27.11	30.01	34.65	27.08	37.04	23.04	37.32	21.86	27.74

* Long-time weather average, 1941-1970.

TEMPERATURES IN KANSAS, 1980 AND AVERAGE

Degrees Fahrenheit

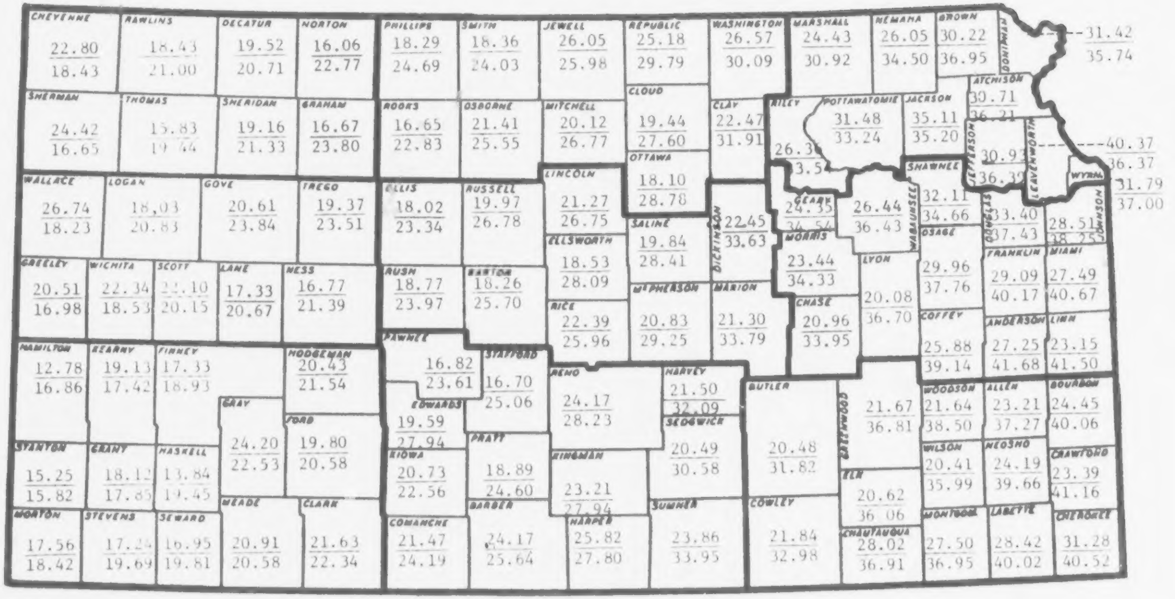
Month	N.W.		W.C.		S.W.		N.C.		C.		S.C.		N.E.		E.C.		S.E.		State	
	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*	1980	Av.*
January	25.3	28.5	26.6	29.7	29.7	32.3	27.2	27.3	29.7	29.5	32.5	32.2	28.8	27.2	30.3	29.9	34.0	33.0	29.6	30.3
February	29.3	33.1	30.9	34.1	33.2	36.7	25.7	32.7	27.7	34.4	30.8	37.1	25.6	32.6	27.8	35.0	31.4	38.1	29.5	35.2
March	35.7	38.5	36.6	39.5	39.7	42.5	37.0	40.0	39.1	41.6	41.6	44.0	38.4	40.7	40.8	42.7	44.1	45.3	39.5	41.9
April	49.3	51.4	49.8	52.3	51.4	55.0	52.3	53.7	53.6	54.9	54.3	56.9	53.8	54.5	54.8	56.1	55.8	58.2	52.9	55.0
May	59.6	61.5	59.8	62.3	60.5	64.6	62.4	63.7	63.6	64.7	64.2	66.2	64.5	64.4	65.1	65.4	66.6	66.8	63.0	64.6
June	74.0	71.2	75.2	72.2	76.4	74.3	76.1	73.5	78.6	74.6	79.0	75.9	76.4	73.3	77.4	74.1	79.1	75.4	77.1	74.0
July	81.7	77.3	83.3	78.0	84.7	79.5	85.2	79.0	87.8	79.8	87.9	80.8	85.7	78.1	87.7	78.8	88.2	80.1	85.9	79.2
August	77.7	76.0	78.1	76.6	79.5	78.1	80.3	78.1	82.1	79.0	83.7	79.8	80.9	77.1	82.2	77.9	84.1	79.5	81.1	78.2
September	68.1	66.5	69.0	67.4	70.8	69.4	69.9	68.3	72.1	69.5	73.8	70.9	70.0	68.2	72.0	69.3	74.8	71.1	71.4	69.1
October	53.4	55.0	54.5	56.1	56.1	58.0	55.1	57.3	56.8	58.6	58.5	60.0	54.6	57.9	56.2	59.1	58.5	60.8	56.2	58.3
November	41.9	40.3	43.1	41.2	44.3	43.4	44.4	41.8	45.7	43.2	46.9	45.1	44.7	42.7	46.0	44.5	47.2	46.6	45.1	43.4
December	36.5	31.3	37.8	32.2	38.4	34.5	33.5	31.0	35.4	32.6	37.8	35.0	32.6	31.4	34.9	33.6	37.9	36.5	36.3	33.4
Annual	52.7	52.5	53.7	53.5	55.4	55.7	54.1	53.9	56.0	55.2	57.6	57.0	54.7	54.0	56.3	55.5	58.5	57.6	55.6	55.2

* Long-time weather average, 1941-1970.

KANSAS PRECIPITATION, 1980

Upper Figure—1980 Total

Lower Figure—1941-70 Average


CHEYENNE 22.80 18.43
RAWLINS 18.43 21.00
DECATUR 19.52 20.71
NORTON 16.06 22.77
PHILLIPS 18.29 24.69
SMITH 18.36 24.03
JEWELL 26.05 25.98
REPUBLIC 25.18 29.79
WASHINGTON 26.57 30.09
MARSHALL 24.43 30.92
NEMAHA 26.05 34.50
BROWN 30.22 36.95
DONIPHAN
31.42 35.74
SHERMAN 24.42 16.65
THOMAS 15.83 19.44
SHERIDAN 19.16 21.33
GRAHAM 16.67 23.80
ROOKS 16.65 22.83
OSBORNE 21.41 25.55
MITCHELL 20.12 26.77
CLOUD 19.44 27.60
CLAY 22.47 31.91
RILEY 26.3 33.5
POTTAWATOMIE 31.48 33.24
JACKSON 35.11 35.20
ATCHISON 30.71 36.21
JEFFERSON 30.93 36.3
LEAVENWORTH
40.37 36.37
WYANDOTTE
31.79 37.00
WALLACE 26.74 18.23
LOGAN 18.03 20.83
GOVE 20.61 23.84
TREGO 19.37 23.51
ELLIS 18.02 23.34
RUSSELL 19.97 26.78
LINCOLN 21.27 26.75
OTTAWA 18.10 28.78
DICKINSON 22.45 33.63
GEARY 24.35 34.54
WABAUNSEE 26.44 36.43
SHAWNEE 32.11 34.66
DOUGLAS 33.40 37.43
JOHNSON 28.51 38.25
GREELEY 20.51 16.98
WICHITA 22.34 18.53
SCOTT 22.10 20.15
LANE 17.33 20.67
NESS 16.77 21.39
RUSH 18.77 23.97
BARTON 18.26 25.70
ELLSWORTH 18.53 28.09
SALINE 19.84 28.41
MORRIS 23.44 34.33
OSAGE 29.96 37.76
FRANKLIN 29.09 40.17
MIAMI 27.49 40.67
RICE 22.39 25.96
McPHERSON 20.83 29.25
MARION 21.30 33.79
CHASE 20.96 33.95
LYON 20.08 36.70
COFFEY 25.88 39.14
ANDERSON 27.25 41.68
LINN 23.15 41.50
HAMILTON 12.78 16.86
KEARNY 19.13 17.42
FINNEY 17.33 18.93
HODGEMAN 20.43 21.54
PAWNEE 16.82 23.61
STAFFORD 16.70 25.06
RENO 24.17 28.23
HARVEY 21.50 32.09
BUTLER 20.48 31.82
GREENWOOD 21.67 36.81
WOODSON 21.64 38.50
ALLEN 23.21 37.27
BOURBON 24.45 40.06
GRAY 24.20 22.53
FORD 19.80 20.58
EDWARDS 19.59 27.94
SEDGWICK 20.49 30.58
STANTON 15.25 15.82
GRANT 18.12 17.85
HASKELL 13.84 19.45
KIOWA 20.73 22.56
PRATT 18.89 24.60
KINGMAN 23.21 27.94
ELK 20.62 36.06
WILSON 20.41 35.99
NEOSHO 24.19 39.66
CRAWFORD 23.39 41.16
MORTON 17.56 18.42
STEVENS 17.24 19.69
SEWARD 16.95 19.81
MEADE 20.91 20.58
CLARK 21.63 22.34
COMANCHE 21.47 24.19
BARBER 24.17 25.64
HARPER 25.82 27.80
SUMNER 23.86 33.95
COWLEY 21.84 32.98
CHAUTAUQUA 28.02 36.91
MONTGOMERY 27.50 36.95
LABETTE 28.42 40.02
CHEROKEE 31.28 40.52

CROP PRODUCTION, DISPOSITION AND VALUE, 1973-80

Crop and Year	Production	Farm disposition		Value	
		Feed and seed	Sold	Production	Sales (cash receipts)
		(000 bushels)		(000 dollars)	
Winter Wheat					
1973	384,800	10,024	374,776	1,443,000	1,405,410
1974	319,000	11,165	307,835	1,231,340	1,188,243
1975	350,900	11,229	339,671	1,200,078	1,161,675
1976	339,000	14,238	324,762	878,010	841,134
1977	344,850	16,208	328,642	772,464	736,158
1978	300,000	11,400	288,600	867,000	834,054
1979	410,400	11,902	398,498	1,526,688	1,482,413
1980	420,000	12,180	407,820	1,617,000	1,570,107
Sorghum for Grain					
1973	218,400	72,072	146,328	465,192	311,679
1974	132,800	43,824	88,976	357,232	239,345
1975	147,000	55,860	91,140	333,690	206,888
1976	165,000	66,000	99,000	306,900	184,140
1977	235,600	89,528	146,072	409,944	254,165
1978	196,860	68,901	127,959	391,751	254,638
1979	246,330	96,069	150,261	541,926	330,574
1980	156,520	54,782	101,738	460,169	299,110
Corn for Grain					
1973	154,000	41,580	112,420	378,840	276,553
1974	131,930	31,663	100,267	397,109	301,804
1975	141,040	29,618	111,422	352,600	278,555
1976	171,840	51,552	120,288	364,301	255,011
1977	161,280	49,997	111,283	320,947	221,453
1978	153,000	45,900	107,100	359,550	251,685
1979	171,990	55,037	116,953	431,695	293,552
1980	116,560	29,140	87,420	396,[illegible]4	297,228
Soybeans					
1973	26,400	676	25,724	149,688	145,855
1974	19,800	645	19,155	125,532	121,443
1975	22,680	522	22,158	108,184	105,694
1976	12,975	545	12,430	84,597	81,044
1977	28,215	705	27,510	155,183	151,305
1978	26,820	617	26,203	178,085	173,988
1979	41,340	827	40,513	246,800	241,863
1980	23,925	598	23,327	181,830	177,285
Oats					
1973	3,440	2,683	757	4,472	984
1974	5,544	4,269	1,275	9,037	2,078
1975	4,360	3,052	1,308	7,063	2,119
1976	8,400	6,132	2,268	13,020	3,515
1977	9,450	6,709	2,741	10,395	3,015
1978	4,095	2,744	1,351	5,733	1,891
1979	3,740	2,655	1,085	6,171	1,790
1980	4,560	3,283	1,277	8,664	2,426
Barley					
1973	3,010	1,385	1,625	4,936	2,665
1974	1,530	765	765	3,152	1,576
1975	1,850	925	925	3,737	1,869
1976	2,170	1,172	998	4,340	1,996
1977	2,628	1,261	1,367	3,968	2,064
1978	2,310	1,178	1,132	3,927	1,924
1979	2,288	1,190	1,098	4,873	2,339
1980	2,419	1,113	1,306	5,685	3,069
Rye					
1973	735	294	441	1,073	644
1974	266	80	186	540	378
1975	168	42	126	363	272
1976	136	38	98	286	206
1977	180	67	113	279	175
1978	315	85	230	567	414
1979	504	106	398	958	756
1980	210	63	147	504	353
		(000 tons)			
All Hay					
1973	5,796	4,231	1,565	223,146	60,253
1974	4,229	3,129	1,100	194,534	50,600
1975	4,890	3,814	1,076	234,720	51,648
1976	4,685	3,607	1,078	248,305	57,134
1977	5,445	4,193	1,252	234,135	53,836
1978	4,720	3,540	1,180	212,400	53,100
1979	5,840	4,438	1,402	283,240	67,997
1980	4,230	3,215	1,015	255,915	61,408

MONTHLY SALES BY FARMERS

Percent of Total

Crop Year	WHEAT											
	June	July	Aug.	Sept.	Oct	Nov	Dec.	Jan.	Feb	Mar.	Apr.	May
1973-74	8	29	17	8	4	5	9	11	4	2	2	1
1974-75	12	13	7	15	12	5	6	7	5	6	7	5
1975-76	10	20	20	8	3	3	5	6	8	6	6	5
1976-77	10	21	15	10	6	4	7	8	6	5	5	3
1977-78	8	15	11	10	8	7	7	6	7	9	8	4
1978-79	9	11	9	10	10	6	5	9	8	7	9	7
1979-80	12	20	15	8	10	5	9	7	5	3	4	2

Crop Year	ALL HAY											
	May	June	July	Aug	Sept	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
1973-74	8	10	15	13	7	6	4	5	13	8	7	4
1974-75	8	11	12	14	8	6	4	6	8	8	10	5
1975-76	6	10	13	13	7	6	9	7	11	8	7	3
1976-77	7	13	10	10	6	4	5	17	10	8	8	2
1977-78	8	11	11	11	7	5	6	12	10	8	8	3
1978-79	7	8	13	8	13	3	6	11	13	7	6	5
1979-80	5	10	13	9	8	4	10	13	8	6	9	5

Crop Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug
						CORN						
1973-74	3	9	16	15	13	10	10	5	6	5	6	2
1974-75	5	16	14	9	12	9	6	7	7	5	5	5
1975-76	5	12	12	13	11	10	8	7	7	5	5	5
1976-77	5	8	14	17	10	11	10	6	5	5	4	5
1977-78	13	17	15	16	6	5	5	6	6	4	4	3
1978-79	7	10	15	9	10	5	7	6	9	9	7	6
1979-80	7	10	12	18	14	10	6	8	3	4	6	2
						SORGHUM GRAIN						
1973-74	2	12	16	13	14	11	10	5	4	4	4	5
1974-75	4	11	18	13	12	6	7	8	6	5	4	6
1975-76	6	14	16	14	12	7	7	6	5	4	4	5
1976-77	10	24	13	11	11	5	5	4	5	3	3	6
1977-78	14	18	20	11	6	6	6	6	4	3	3	3
1978-79	6	13	12	8	10	5	8	9	6	12	6	5
1979-80	3	18	15	17	11	11	4	6	4	5	4	2
						SOYBEANS						
1973-74	2	12	15	8	19	11	7	5	7	6	5	3
1974-75	3	17	11	10	13	10	12	5	5	4	6	4
1975-76	3	11	15	10	11	9	8	6	11	8	5	3
1976-77	7	36	18	9	6	9	6	4	2	1	1	1
1977-78	2	23	18	18	6	5	9	6	6	2	3	2
1978-79	8	21	8	9	10	12	9	4	7	8	2	2
1979-80	8	22	10	8	8	8	8	9	5	5	4	5

STOCKS OF GRAIN BY QUARTERS, 1979-81

	1979			1980			1981		
	Farm stocks	Off farm stocks	Total stocks	Farm stocks	Off farm stocks	Total stocks	Farm stocks	Off farm stocks	Total stocks
	(000 bushels)								
Wheat									
October 1 (previous year)	90,000	317,348	407,348	98,496	332,542	431,038	117,600	408,544	526,144
January 1	54,000	240,308	294,308	73,872	258,235	332,107	79,800	310,980	390,780
April 1	39,000	173,217	212,217	57,456	164,871	222,327	50,400	216,087	266,487
June 1	33,000	120,361	153,361	32,832	136,984	169,816	42,000	160,801	202,801
Oats									
October 1 (previous year)	3,399	1,170	4,569	3,366	1,079	4,445	2,918	1,351	4,269
January 1	3,071	997	4,068	2,244	738	2,982	2,371	1,212	3,583
April 1	2,088	743	2,831	1,421	988	2,409	1,322	791	2,113
June 1	1,515	638	2,153	1,197	1,094	2,291	1,049	616	1,665
Barley									
October 1 (previous year)	1,063	549	1,612	1,075	573	1,648	1,451	420	1,871
January 1	809	483	1,292	824	347	1,171	968	326	1,294
April 1	462	268	730	572	433	1,005	556	171	727
June 1	347	328	675	343	708	1,051	363	140	503
Rye									
October 1 (previous year)	110	4	114	252	........[1]	........[1]	116	........[1]	........[1]
January 1	76	1	77	141	........[1]	........[1]	71	........[1]	........[1]
April 1	63	........[1]	........[1]	106	........[1]	........[1]	55	........[1]	........[1]
June 1	47	........[1]	........[1]	76	........[1]	........[1]	32	........[1]	........[1]
Corn									
January 1	48,960	67,593	116,553	67,076	68,688	135,764	33,802	54,978	88,780
April 1	33,660	45,831	79,491	42,998	48,218	91,216	18,650	42,408	61,058
June 1	26,010	33,433	59,443	29,238	37,248	66,486	9,325	27,725	37,050
October 1	13,770	21,281	35,051	10,319	30,448	40,767	....	....	....
Sorghum Grain									
January 1	62,995	115,696	178,691	76,362	154,297	230,659	42,260	119,597	161,857
April 1	39,372	83,440	122,812	46,803	93,145	139,948	29,739	77,642	107,381
June 1	31,498	71,987	103,485	29,560	60,641	90,201	15,652	28,678	44,330
October 1	9,843	38,732	48,575	12,317	36,071	48,388	....	....	....
Soybeans									
January 1	9,119	16,528	25,647	12,402	24,862	37,264	6,699	24,481	31,180
April 1	5,096	12,373	17,469	7,441	16,631	24,072	5,503	18,387	23,890
June 1	3,487	5,307	8,794	5,788	11,226	17,014	4,546	14,886	19,432
September 1	1,073	2,254	3,327	2,894	4,622	7,516	....	....	....

1. Not published to avoid disclosing individual operations.

PRODUCER OWNED GRAIN, JANUARY 1, 1979-81

	1979	1980	1981
	(000 bushels)		
Wheat	176,446	158,732	188,656
Soybeans	8,361	16,167	10,951

COMMERCIAL GRAIN STORAGE CAPACITY

	1973	1974	1975	1976	1977	1978	1979	1980	1981
	(000 bushels)								
January 1	780,000	782,000	782,000	780,000	780,000	830,000	846,000	844,000	848,000

CROP ACRES BY SIZE GROUPS, 1980 [1]

Acres	Corn		Sorghum		Wheat	
	Farms reporting	Acres reported	Farms reporting	Acres reported	Farms reporting	Acres reported
	percent		percent		percent	
Northwest						
1-99	32.4	6.9	64.3	28.6	16.1	2.9
100-249	35.0	22.1	27.8	40.2	33.2	16.7
250-599	22.6	32.6	7.1	24.0	36.2	41.0
600 or more	10.0	38.4	.8	7.2	14.5	39.4
West Central						
1-99	28.0	4.6	42.6	11.0	13.8	1.9
100-249	32.9	17.9	32.8	27.8	27.8	11.4
250-599	27.4	34.9	19.3	38.0	36.1	33.1
600 or more	11.7	42.6	5.3	23.2	22.3	53.6
Southwest						
1-99	15.7	2.3	31.9	5.4	11.3	1.5
100-249	31.1	13.1	29.1	16.3	26.4	9.6
250-599	36.3	35.0	25.1	33.3	36.6	31.0
600 or more	16.9	49.6	13.9	45.0	25.7	57.9
North Central						
1-99	64.6	24.7	56.7	22.2	31.8	7.3
100-249	25.7	37.9	32.3	41.6	35.4	24.7
250-599	8.8	30.9	9.9	29.1	25.7	41.3
600 or more	.9	6.5	1.1	7.1	7.1	26.7
Central						
1-99	76.7	29.7	68.4	31.2	26.5	6.2
100-249	17.1	28.3	25.0	42.0	37.1	25.6
250-599	4.8	20.5	6.1	22.7	30.0	45.9
600 or more	1.4	21.5	.5	4.1	6.4	22.3
South Central						
1-99	47.3	12.3	61.3	23.9	19.2	2.9
100-249	30.8	28.2	27.8	38.0	28.5	13.3
250-599	18.5	40.7	9.8	30.7	34.5	37.6
600 or more	3.4	18.8	1.1	7.4	17.8	46.2
Northeast						
1-99	71.4	26.5	69.3	32.8	77.9	41.7
100-249	18.9	29.7	24.6	41.4	18.6	38.9
250-599	8.4	32.0	5.8	22.9	3.4	16.6
600 or more	1.3	11.8	.3	2.9	.1	2.8
East Central						
1-99	78.5	38.0	73.3	36.0	76.6	38.5
100-249	16.8	33.0	21.2	38.9	18.5	36.7
250-599	3.8	18.3	5.2	22.3	4.6	20.5
600 or more	.9	10.7	.3	2.8	.3	4.3
Southeast						
1-99	86.5	53.1	70.3	31.5	60.9	21.1
100-249	11.2	30.4	22.6	38.1	25.8	32.4
250-599	2.2	14.8	6.5	24.9	11.3	32.9
600 or more	.1	1.7	.6	5.5	2.0	13.6
State						
1-99	61.8	15.9	62.1	22.5	36.4	6.5
100-249	21.9	23.1	26.5	34.2	28.5	18.1
250-599	12.2	31.1	9.4	28.4	24.7	36.7
600 or more	4.1	29.9	2.0	14.9	10.4	38.7

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[1] Based on Annual State Farm Census reports.

TOTAL ACRES AVAILABLE FOR IRRIGATION IN 1980[1]

District & County	Acres
Northwest District:	
Cheyenne	59,000
Decatur	14,000
Graham	19,400
Norton	13,200
Rawlins	25,000
Sheridan	75,800
Sherman	117,000
Thomas	95,000
District total	418,400
West Central District:	
Gove	24,800
Greeley	30,000
Lane	25,000
Logan	16,000
Ness	12,000
Scott	110,000
Trego	8,000
Wallace	64,000
Wichita	125,000
District total	414,800
Southwest District:	
Clark	10,500
Finney	258,000
Ford	87,000
Grant	150,000
Gray	203,000
Hamilton	36,000
Haskell	238,000
Hodgeman	25,000
Kearny	102,000
Meade	125,000
Morton	73,000
Seward	102,000
Stanton	165,000
Stevens	126,000
District total	1,700,500
North Central District:	
Clay	15,000
Cloud	13,500
Jewell	12,200
Mitchell	5,400
Osborne	15,000
Ottawa	4,000
Phillips	6,200
Republic	44,500
Rooks	4,600
Smith	10,000
Washington	9,400
District total	139,800
Central District:	
Barton	37,500
Dickinson	3,500
Ellis	8,000
Ellsworth	1,700
Lincoln	2,000
McPherson	28,500
Marion	2,600
Rice	17,100
Rush	16,000
Russell	1,200
Saline	10,000
District total	128,100
South Central District:	
Barber	3,200
Comanche	8,000
Edwards	75,000
Harper	2,000
Harvey	18,000
Kingman	11,900
Kiowa	48,000
Pawnee	66,000
Pratt	54,000
Reno	24,000
Sedgwick	24,400
Stafford	56,000
Sumner	4,500
District total	395,000
Northeast District:	
Atchison	500
Brown	500
Doniphan	1,300
Jackson	2,000
Jefferson	2,300
Leavenworth	200
Marshall	2,800
Nemaha	500
Pottawatomie	10,000
Riley	3,700
Wyandotte	300
District total	24,100
East Central District:	
Anderson	1,700
Chase	1,000
Coffey	1,000
Douglas	1,300
Franklin	4,000
Geary	1,500
Johnson	1,700
Linn	100
Lyon	1,300
Miami	1,200
Morris	1,500
Osage	900
Shawnee	12,600
Wabaunsee	6,200
District total	36,000
Southeast District:	
Allen	1,500
Bourbon	1,800
Butler	1,500
Chautauqua	200
Cherokee	1,200
Cowley	1,500
Crawford	2,000
Elk	500
Greenwood	1,500
Labette	2,000
Montgomery	2,400
Neosho	1,300
Wilson	3,500
Woodson	400
District total	21,300
State	3,278,000

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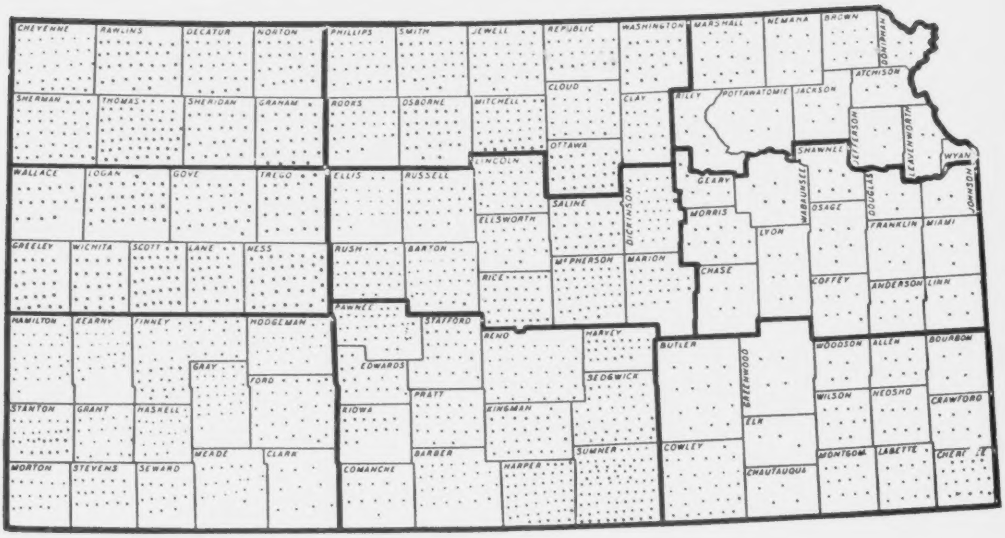
[1] Represents total acres that could be irrigated if conditions warrant.

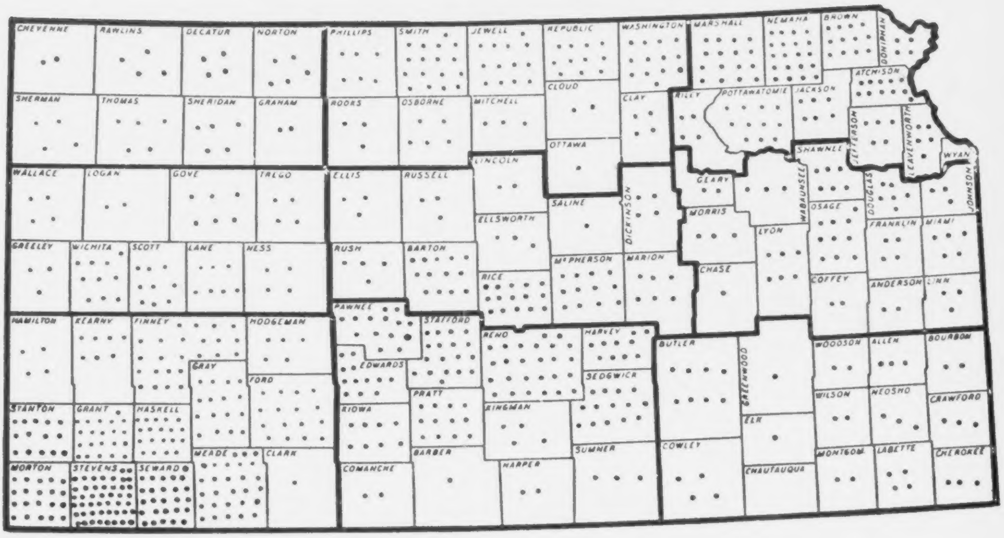
WHEAT PRODUCTION, 1980

1 Dot=200,000 Bushels



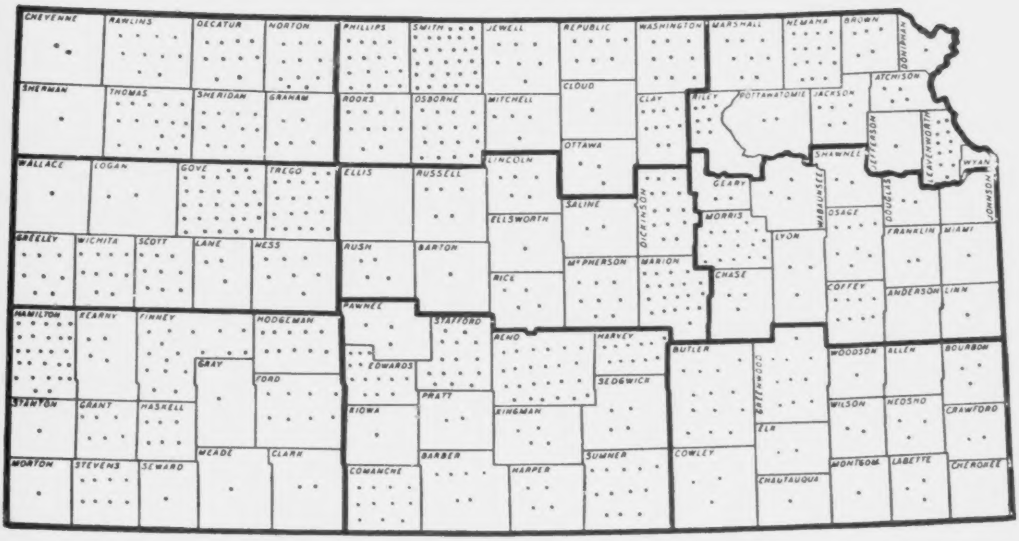
SORGHUM GRAIN PRODUCTION, 1980

1 Dot=200,000 Bushels



SORGHUM SILAGE PRODUCTION, 1980

1 dot=4,000 tons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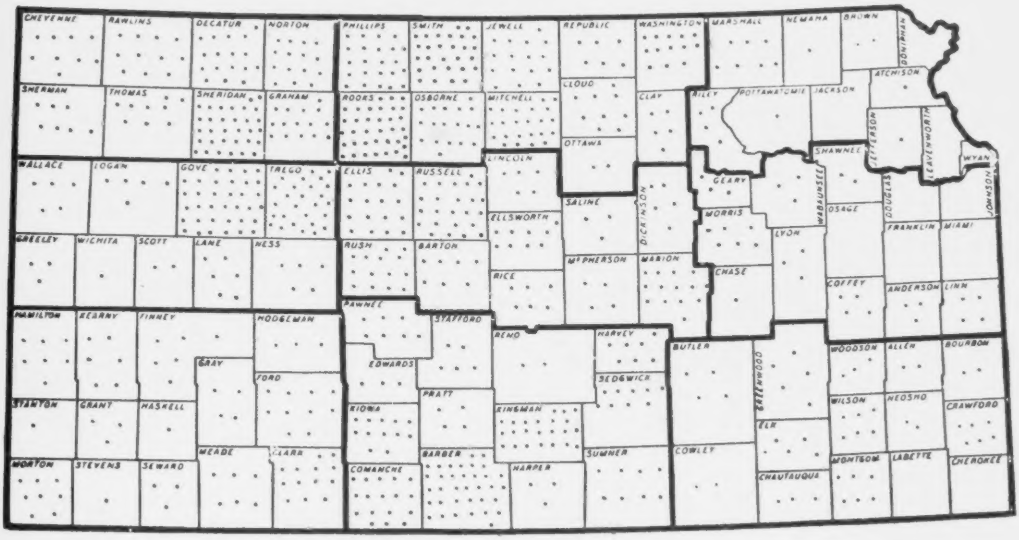
SUMNER
COWLEY
CHAUTAUQUA
MONTGOM.
LABETTE
CHEROKEE

SORGHUM FORAGE PRODUCTION, 1980

1 dot=1,500 tons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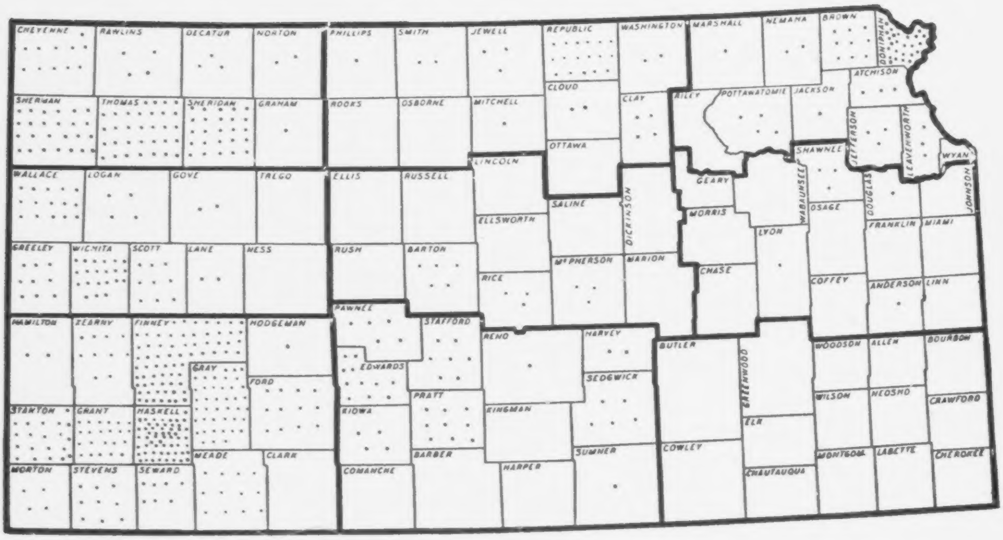
CHEROKEE

CORN GRAIN PRODUCTION, 1980

1 Dot=200,000 Bushels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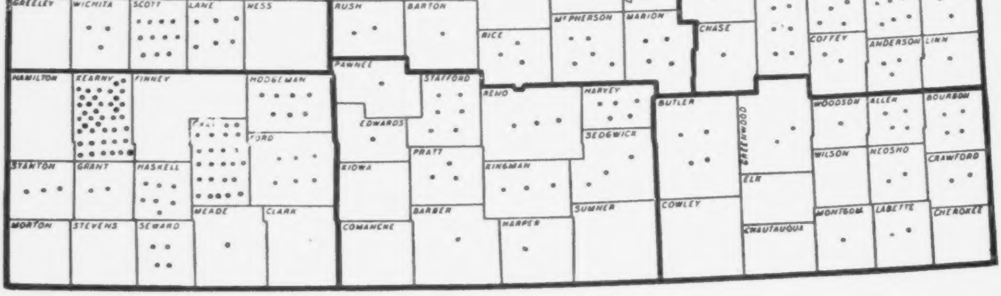
LABETTE
CHEROKEE

CORN SILAGE PRODUCTION, 1980

1 Dot=10,000 Tons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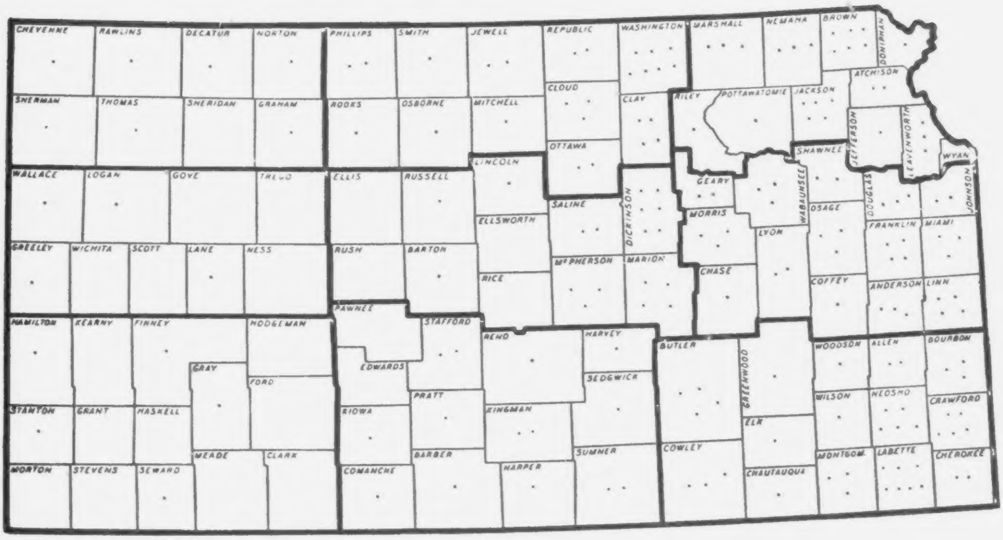
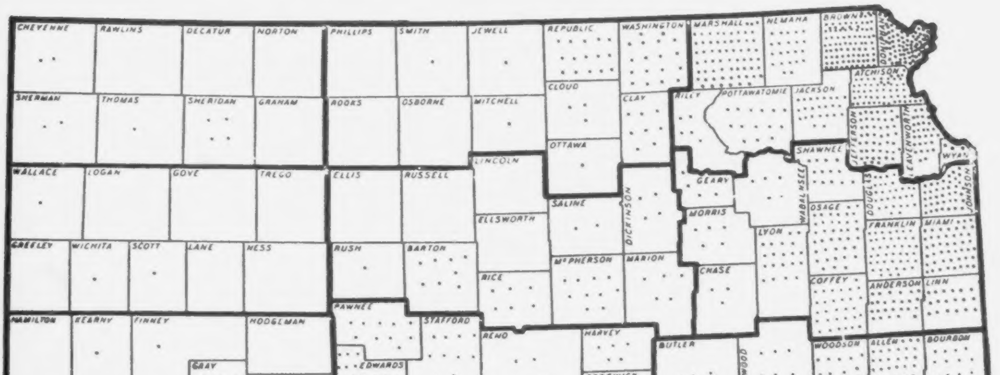
OATS PRODUCTION, 1980

1 Dot=25,000 Bushels



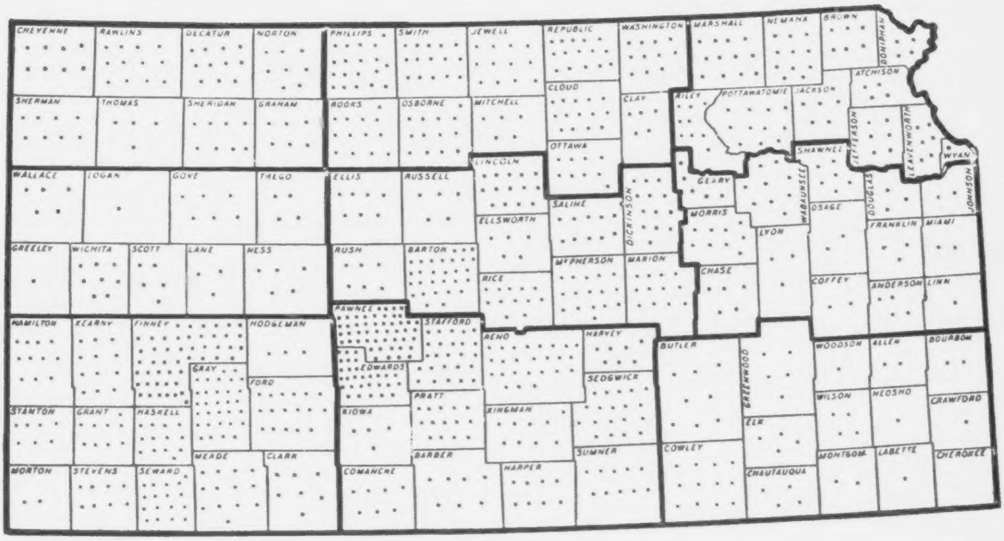
SOYBEANS PRODUCTION, 1980

1 Dot=20,000



ALFALFA HAY PRODUCTION, 1980

1 dot=3,000 tons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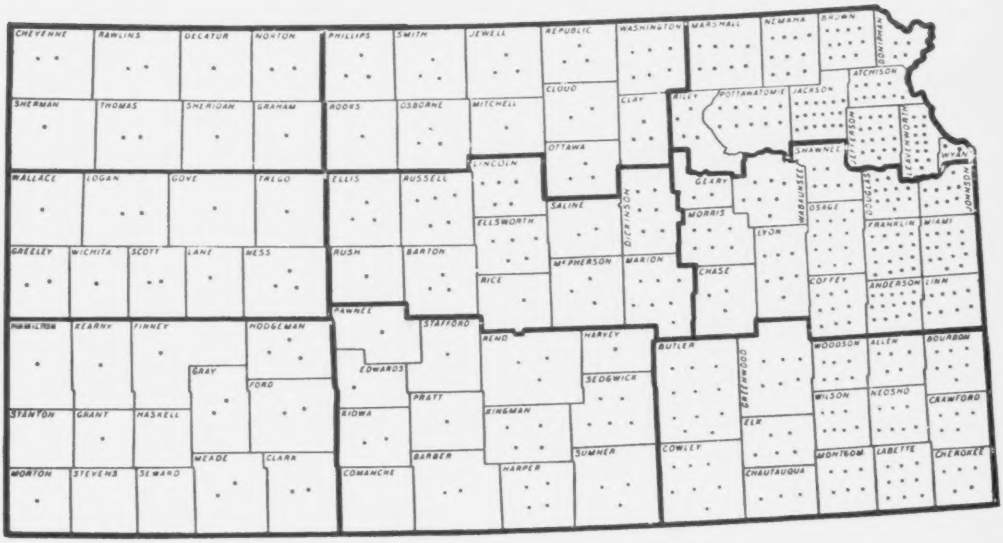
COMANCHE
HARPER
CHAUTAUQUA

ALL OTHER HAY PRODUCTION—1980

1 dot=3,000 tons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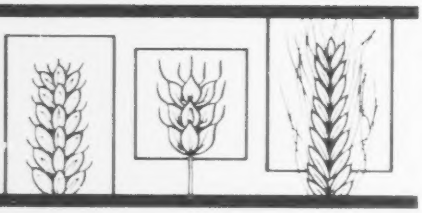
CHAUTAUQUA

KANSAS WHEAT



BY LARRY CANION

Kansas farmers produced a record 420.0 million bushel wheat crop in 1980, exceeding the 1979 crop by 2 percent and the second year for wheat production to top the 400 million bushel mark. The value of production of the 1980 wheat crop, at $1,617 million, was also at a record high level, surpassing the previous record level of $1,527 million set in 1979 by 6 percent. Prices received by farmers for their wheat averaged $3.85 per bushel, second highest of record.

The 1980 crop was seeded on 13,000,000 acres, 7 percent above 1979 and 15 percent above 1978. Harvested acres totaled 12,000,000, compared with 10,800,000 for 1979. Abandonment, at 1,000,000 acres, accounted for 7.7 percent of the crop compared with 10.7 percent in 1979 and a 5-year average of 8.2 percent.

The yield averaged 35.0 bushels per acre in 1980, down slightly from the record 38.0 bushel yield reached in 1979. The sharpest decline was noted in continuous cropped wheat which fell to 32.7 bushels per acre, 13 percent below a year earlier. Irrigated yields averaged 44.4 bushels, down 10 percent, while summer fallow yields, at 36.4 bushels, were down only 3 percent from 1979.

Sumner County retained its role as the leading producer with an output of 15.1 million bushels while Thomas County, with 11.1 million bushels moved into second place. Harper County held on to its perennial third place with a production of 9.8 million bushels. Sumner was also the leading producer of continuous cropped wheat by a wide margin with 12.4 million bushels while Thomas was the number one producer of summer fallow wheat with 10.7 million bushels. Haskell County took over as the leading producer of irrigated wheat with 2.6 million bushels.

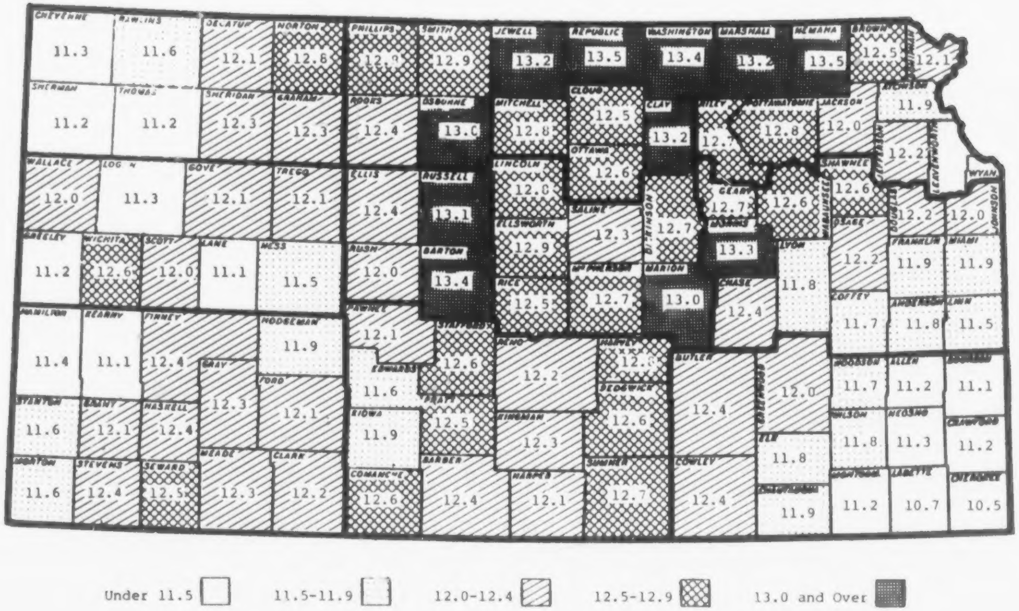
Quality tests of the 1980 Kansas wheat crop indicated a protein content of 12.3 percent compared with 12.1 percent for 1979 and a 10-year average of 11.6 percent. Test weight averaged 61.2 pounds per bushel, registering a slight increase over the 60.8 pounds average of 1979 but still short of the 10-year average of 61.4 pounds. Only 11.9 percent of the wheat tested averaged below 60.0 pounds per bushel compared with 24.1 percent in 1979.

Strong and medium-to-strong gluten varieties accounted for slightly less than half of the State's 1980 acreage. Newton, a medium-to-strong variety, was the most popular variety, at 17.5 percent, followed by Eagle, a strong gluten variety, with 15.7 percent of the State's acreage. Scout and Larned, both medium varieties, accounted for 12.5 and 11.2 percent, respectively. The medium-to-mellow and mellow varieties were seeded on 9.1 percent of the State's acreage.

NEWTON INCREASES LEAD AS MOST POPULAR VARIETY FOR 1981 CROP

Newton continues its meteoric rise as the most popular variety of wheat grown in Kansas and was seeded to 4.8 million acres to be harvested in 1981. The selection and development of Newton was carried out at Kansas State University under the direction of Dr. Elmer E. Heyne. A relative newcomer, Newton was seeded on only one-tenth of one percent of the wheat acreage in 1978 and by 1981 accounted for 34.2 percent of all wheat seeded for harvest in Kansas. Larned, another newcomer, ranked as the second leading variety with 12.0 percent of the 1981 acreage. Larned first appeared on the horizon in 1978, the same year as Newton, and rapidly progressed from seventh place to number two. Eagle was listed in third place with 11.3 percent of the State's acreage, having dropped from second place in 1980. Scout, including Scout 66, occupied the number four position, accounting for 9.2 percent of the 1981 seeded acreage. A very popular variety in the 70's, Scout reached its peak in 1972 and as recently as 1977 still held first place. Vona, another new variety, was holding fifth place, at 6.7 percent, having moved up from ninth place in 1980. The other top ten varieties were Sage (5.7 percent), Centurk (3.0), Tam 101 (3.0), Triumph (2.7), and Wings (1.8). Soft red winter varieties accounted for about 4 to 8 percent of the wheat seeded in the eastern districts but represented only about 1 percent of the State acreage.

WHEAT PROTEIN CONTENT—1980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ROOKS
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CHAUTAUQUA
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MONTGOMERY
11.2
LABETTE
10.7
CHEROKEE
10.5
Under 11.5
11.5-11.9
12.0-12.4
12.5-12.9
13.0 and Over

DISTRIBUTION OF WINTER WHEAT VARIETIES, 1981 CROP

Variety	Crop Reporting District									
	North-west	West Cen-tral	South-west	North Cen-tral	Cen-tral	South Cen-tral	North-east	East Cen-tral	South-east	State
	Percent of Seeded Acreage									
Newton	15.1	13.8	15.0	39.8	51.5	42.4	57.4	59.7	47.3	34.2
Larned	20.0	23.2	18.2	13.1	11.0	6.1	.5	...	...	12.0
Eagle	20.2	20.8	24.2	7.0	5.3	4.7	.8	.1	...	11.3
Scout [1]	14.3	18.5	18.9	3.4	4.0	3.0	2.2	.7	...	9.2
Vona	3.3	5.9	7.8	8.2	4.8	7.7	1.4	3.5	3.9	6.7
Sage	11.7	9.8	6.3	6.4	6.0	1.9	...	1.0	...	5.7
Centurk	4.5	1.7	.2	3.0	3.9	3.7	8.0	5.0	2.3	3.0
Tam 101	...	.1	1.4	2.9	.9	8.3	.8	1.8	1.5	3.0
Triumph [2]	...	.1	.3	.3	1.1	5.0	3.7	3.0	15.3	2.7
Wings	1.2	.1	1.0	4.2	1.3	1.4	3.2	1.5	1.9	1.8
Trison	...	...	...	1.0	1.0	3.7	...	.9	1.0	1.1
Buckskin	4.3	1.1	1.2	.1	.8	1.1	.7	2.0	...	1.1
Rocky	.3	1.2	...	1.9	1.3	.5	3.2	1.3	.8	.8
Parker [3]	.1	...	...	1.9	.5	.2	2.1	3.7	1.9	.6
Satanta	.2	.2	.5	.1	.9	1.1	...	.1	.9	.5
S 76 [4]	.1	...	...	...	...	...	3.5	3.7	4.1	.5
Plainsman V	...	.3	.1	...	...	1.0	...	...	4.2	.5
Century II	...	.2	...	.1	.7	.5	...	.8	2.3	.4
Baca	.4	.1	1.1	...	...	...	...	...	...	.3
Gage	.5	...	...	.8	.2	.1	5.3	1.9	.2	.3
Homestead	...	...	...	.7	1.0	.2	2.1	.4	.1	.2
Chanute	...	...	...	...	...	.8	.9	1.5	1.2	.2
Bennett	.4	...	...	1.2	.5	...	.5	...	...	.2
Apache	...	.4	.2	...	...	.3	0	0	...	.1
Danne	...	...	.1	.1	...	.4	...	...	1.2	.1
Lancer	.3	.1	.1	...	.3	...	...	...	...	.1
Lancota	.7	...	...	.7	.2	...	...	.2	...	.1
Hart [4]	...	...	...	...	...	...	.1	1.1	2.1	.1
PL 145	.1	.1	.1	...	...	.2	.4	1.0	1.1	.1
Lindon	...	...	...	.8	.1	.1	.2	.8	.4	.1
Other [5]	2.3	2.3	3.3	2.3	2.7	5.6	3.0	4.3	6.3	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

DISTRIBUTION OF WINTER WHEAT VARIETIES, 1972-81

Variety	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
	Percent of Seeded Acreage									
Newton	...	...	...	...	...	...	.1	2.8	17.5	34.2
Larned	...	...	...	...	...	...	2.8	8.4	11.1	12.0
Eagle	1.2	8.9	17.8	22.6	20.1	19.9	23.0	21.1	15.7	11.3
Scout [1]	47.7	46.5	36.5	33.2	25.2	21.7	19.6	15.6	12.5	9.2
Vona	...	...	...	...	...	...	...	.8	2.9	6.7
Sage	...	...	...	1.9	10.1	14.7	14.0	12.7	8.8	5.7
Centurk	...	3.9	9.5	9.8	9.8	11.9	10.0	8.7	5.9	3.0
Tam 101	...	...	...	.8	2.4	3.0	4.1	4.9	4.8	3.0
Triumph [2]	10.5	9.4	8.3	8.2	7.9	6.3	5.8	6.5	5.1	2.7
Wings	...	...	...	...	...	...	...	...	.8	1.8
Trison	...	...	...	.3	.7	.9	2.0	1.8	1.8	1.1
Buckskin	...	...	...	.2	1.0	1.5	2.7	2.2	1.3	1.1
Rocky	...	...	...	...	...	...	...	...	.1	.8
Parker [3]	9.3	8.5	7.6	6.4	5.0	3.0	1.7	1.4	1.3	.6
Satanta	10.5	5.9	4.7	2.7	3.5	2.9	2.2	1.7	1.0	.5
S 76 [4]	...	...	...	...	...	...	...	...	.4	.5
Plainsman V	...	...	...	...	...	...	.1	.1	.2	.5
Century II	...	...	...	...	...	.2	.4	.5	.5	.4
Baca	...	...	...	...	...	.4	.2	.3	.2	.3
Gage	2.9	2.5	2.4	2.2	2.4	3.0	2.0	1.2	1.0	.3
Homestead	...	...	...	...	.6	1.2	1.9	1.4	.9	.2
Chanute	2.7	2.6	2.7	2.0	1.9	1.5	1.1	.8	.5	.2
Bennett	...	...	...	...	...	...	...	...	...	.2
Apache	2.0	1.5	1.0	1.0	.9	.7	.7	.4	.5	.1
Danne	.1	.6	.9	1.1	.6	.7	1.0	.4	.2	.1
Lancer	1.7	.9	.8	.2	.2	...	.1	.2	.1	.1
Lancota	...	...	...	...	...	...	.7	1.1	.2	.1
Hart [4]	...	...	...	...	...	...	...	...	.1	.1
PL 145	...	...	...	...	...	...	...	...	...	.1
Lindon	...	...	...	...	...	...	...	...	.2	.1
Other [5]	11.4	8.8	7.8	7.4	7.7	6.5	3.8	5.0	4.4	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1. Includes Scout and Scout 66.
2. Includes Triumph and improved strains.
3. Includes Parker and Parker 76.
4. Soft red winter varieties.
5. Includes some soft red winter varieties.

WHEAT, 1979

County	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
Northwest District:					
Cheyenne	148,000	124,800	28.0	3,499,900	12,399,400
Decatur	129,000	117,400	39.7	4,661,600	16,515,100
Graham	130,000	124,100	39.1	4,851,400	17,187,500
Norton	129,000	112,500	39.6	4,452,300	15,773,600
Rawlins	153,000	120,400	37.1	4,465,600	15,820,700
Sheridan	122,000	104,700	43.3	4,529,000	16,045,300
Sherman	199,000	176,200	33.4	5,893,400	20,879,100
Thomas	257,000	223,900	44.3	9,928,800	35,175,800
District total	1,267,000	1,104,000	38.3	42,282,000	149,796,500
West Central District:					
Gove	141,000	70,700	38.7	2,738,300	9,918,600
Greeley	200,000	177,300	29.2	5,178,000	18,755,600
Lane	145,000	78,500	39.4	3,092,800	11,202,700
Logan	152,000	127,000	39.3	4,992,800	18,084,900
Ness	187,000	117,300	30.5	3,578,000	12,960,200
Scott	144,000	103,000	39.4	4,054,000	14,684,400
Trego	121,000	91,300	34.7	3,169,600	11,480,900
Wallace	103,000	84,200	29.0	2,445,100	8,856,600
Wichita	132,000	116,700	30.0	3,498,400	12,671,900
District total	1,325,000	966,000	33.9	32,747,000	118,615,800
Southwest District:					
Clark	107,000	85,400	38.4	3,278,200	12,069,400
Finney	250,000	205,900	38.3	7,889,500	29,046,900
Ford	226,000	204,900	39.7	8,134,200	29,948,000
Grant	89,000	63,500	46.3	2,939,500	10,822,400
Gray	163,000	134,600	41.7	5,609,800	20,653,700
Hamilton	197,000	173,800	26.6	4,621,100	17,013,600
Haskell	105,000	57,200	49.6	2,836,100	10,441,700
Hodgeman	148,000	138,400	42.8	5,927,800	21,824,500
Kearny	180,000	153,600	32.4	4,971,600	18,304,000
Meade	150,000	126,400	39.4	4,978,500	18,329,400
Morton	97,000	59,300	36.0	2,135,500	7,862,300
Seward	82,000	76,600	45.3	3,470,600	12,777,800
Stanton	149,000	116,800	39.5	4,611,900	16,979,700
Stevens	97,000	69,600	41.7	2,902,700	10,686,900
District total	2,040,000	1,666,000	38.6	64,307,000	236,760,300
North Central District:					
Clay	103,000	99,400	32.8	3,255,900	12,051,900
Cloud	146,000	144,100	38.8	5,590,500	20,693,600
Jewell	127,000	125,000	35.7	4,462,100	16,516,700
Mitchell	206,000	198,000	39.2	7,752,300	28,695,600
Osborne	144,000	141,600	39.7	5,625,100	20,821,600
Ottawa	148,000	144,200	40.8	5,890,000	21,802,200
Phillips	104,000	101,300	39.7	4,018,600	14,875,100
Republic	102,000	95,800	32.9	3,155,200	11,679,200
Rooks	126,000	121,100	40.7	4,929,900	18,248,300
Smith	119,000	116,100	40.3	4,679,500	17,321,400
Washington	106,000	102,400	38.8	3,977,900	14,724,400
District total	1,431,000	1,389,000	38.4	53,337,000	197,430,000
Central District:					
Barton	240,000	230,900	31.2	7,205,300	27,028,400
Dickinson	180,000	173,700	38.2	6,627,000	24,859,100
Ellis	134,000	124,200	32.9	4,091,900	15,349,500
Ellsworth	118,000	115,400	37.7	4,352,900	16,328,500
Lincoln	133,000	126,600	39.3	4,979,200	18,677,900
McPherson	231,000	223,600	39.4	8,818,800	33,080,900
Marion	165,000	157,800	33.9	5,344,500	20,048,200
Rice	202,000	196,300	40.0	7,856,100	29,469,700
Rush	153,000	145,600	37.9	5,522,000	20,714,000
Russell	131,000	125,800	40.7	5,116,100	19,191,400
Saline	166,000	163,100	41.5	6,768,200	25,388,700
District total	1,853,000	1,783,000	37.4	66,682,000	250,136,300

WHEAT, 1979—*Concluded*

County	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
South Central District:					
Barber	209,000	170,300	39.4	6,706,200	25,489,000
Comanche	121,000	106,800	38.4	4,103,700	15,597,400
Edwards	112,000	105,400	35.3	3,717,400	14,129,100
Harper	307,000	266,900	41.9	11,193,100	42,542,800
Harvey	138,000	130,000	37.7	4,905,700	18,645,600
Kingman	249,000	235,200	38.8	9,121,900	34,670,600
Kiowa	108,000	99,000	36.7	3,634,800	13,815,200
Pawnee	189,000	181,700	34.5	6,267,900	23,823,100
Pratt	187,000	181,200	38.0	6,890,700	26,190,200
Reno	337,000	317,900	35.6	11,315,300	43,007,300
Sedgwick	254,000	239,900	37.9	9,099,700	34,586,200
Stafford	174,000	156,400	40.5	6,328,800	24,054,500
Sumner	475,000	455,300	39.1	17,789,800	67,615,500
District total	2,860,000	2,646,000	38.2	101,075,000	384,166,500
Northeast District:					
Atchison	17,000	13,900	37.0	513,800	1,988,600
Brown	40,000	38,300	43.4	1,661,200	6,429,300
Doniphan	13,000	12,500	44.7	558,400	2,161,200
Jackson	23,000	22,000	33.6	738,200	2,857,000
Jefferson	15,000	13,700	38.1	521,500	2,018,400
Leavenworth	12,000	10,600	39.6	419,400	1,623,200
Marshall	94,000	86,700	39.8	3,447,800	13,343,900
Nemaha	34,000	32,300	38.6	1,245,700	4,821,200
Pottawatomie	26,000	24,800	42.4	1,050,800	4,066,900
Riley	30,000	28,200	32.1	903,900	3,498,300
Wyandotte	1,000	1,000	43.3	43,300	167,600
District total	305,000	284,000	39.1	11,104,000	42,975,600
East Central District:					
Anderson	29,000	27,900	48.9	1,363,100	5,140,300
Chase	27,000	26,100	40.6	1,060,900	4,000,700
Coffey	35,000	32,100	41.1	1,317,600	4,968,700
Douglas	17,000	16,600	43.3	719,600	2,713,600
Franklin	20,000	19,700	44.3	871,800	3,287,600
Geary	24,000	22,600	44.6	1,006,900	3,797,100
Johnson	10,000	9,900	49.1	485,700	1,831,600
Linn	22,000	21,200	46.7	989,100	3,729,900
Lyon	34,000	32,100	38.6	1,240,500	4,678,000
Miami	16,000	15,600	45.3	705,900	2,662,000
Morris	55,000	52,000	39.1	2,035,600	7,676,300
Osage	28,000	27,500	41.6	1,145,300	4,319,000
Shawnee	21,000	20,400	38.8	792,500	2,988,600
Wabaunsee	21,000	20,300	38.5	782,500	2,950,800
District total	359,000	344,000	42.2	14,517,000	54,744,200
Southeast District:					
Allen	28,000	27,500	40.4	1,110,100	4,197,300
Bourbon	19,000	18,400	35.9	660,000	2,495,400
Butler	86,000	79,600	35.2	2,799,600	10,585,200
Chautauqua	16,000	13,500	37.7	508,500	1,922,600
Cherokee	83,000	81,200	40.5	3,285,900	12,423,900
Cowley	146,000	135,800	38.2	5,183,400	19,598,200
Crawford	34,000	31,600	39.2	1,237,700	4,679,700
Elk	16,000	13,800	36.6	504,700	1,908,300
Greenwood	16,000	14,500	42.8	620,100	2,344,600
Labette	66,000	59,100	43.1	2,545,100	9,622,900
Montgomery	54,000	51,000	41.2	2,099,500	7,938,100
Neosho	36,000	34,800	42.4	1,474,300	5,574,300
Wilson	42,000	39,900	40.2	1,602,700	6,059,800
Woodson	18,000	17,300	41.5	717,400	2,712,500
District total	660,000	618,000	39.4	24,349,000	92,062,800
State	12,100,000	10,800,000	38.0	410,400,000	1,526,688,000

WHEAT, 1980

County	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
Northwest District:					
Cheyenne	163,000	156,100	42.5	6,627,800	24,279,900
Decatur	136,000	129,900	42.4	5,509,500	20,183,200
Graham	138,000	132,300	37.5	4,960,100	18,170,600
Norton	136,000	126,100	38.7	4,880,000	17,877,100
Rawlins	170,000	160,700	40.5	6,503,200	23,823,500
Sheridan	126,000	120,700	38.9	4,691,100	17,185,100
Sherman	211,000	195,000	39.8	7,752,600	28,400,500
Thomas	260,000	249,200	44.5	11,095,700	40,647,500
District total	1,340,000	1,270,000	41.0	52,020,000	190,567,400
West Central District:					
Gove	151,000	142,000	40.4	5,731,700	21,453,700
Greeley	205,000	164,300	30.1	4,943,200	18,502,300
Lane	150,000	141,700	38.2	5,406,400	20,236,100
Logan	190,000	179,500	37.2	6,685,700	25,024,500
Ness	197,000	188,600	39.2	7,389,300	27,658,100
Scott	163,000	155,200	41.2	6,389,200	23,914,700
Trego	133,000	127,000	34.7	4,404,000	16,484,100
Wallace	113,000	91,400	34.5	3,153,700	11,804,300
Wichita	148,000	130,300	36.0	4,686,800	17,542,600
District total	1,450,000	1,320,000	37.0	48,790,000	182,620,400
Southwest District:					
Clark	103,000	84,900	23.8	2,023,500	7,694,800
Finney	282,000	262,100	35.1	9,189,300	34,944,500
Ford	239,000	211,400	27.4	5,801,400	22,061,000
Grant	105,000	99,500	39.3	3,906,300	14,854,500
Gray	188,000	173,500	35.5	6,167,200	23,452,100
Hamilton	205,000	190,800	31.8	6,059,400	23,042,100
Haskell	126,000	113,300	39.5	4,471,200	17,002,700
Hodgeman	143,000	126,800	32.7	4,146,100	15,766,400
Kearny	168,000	157,700	31.1	4,898,300	18,626,800
Meade	155,000	135,700	27.3	3,708,600	14,102,700
Morton	115,000	103,500	34.2	3,534,700	13,441,400
Seward	99,000	81,000	31.7	2,566,800	9,760,800
Stanton	169,000	161,300	37.4	6,039,700	22,967,200
Stevens	103,000	98,500	36.4	3,587,500	13,642,200
District total	2,200,000	2,000,000	33.1	66,100,000	251,359,200
North Central District:					
Clay	117,000	107,800	32.4	3,492,200	13,332,600
Cloud	163,000	157,700	31.8	5,012,900	22,192,600
Jewell	147,000	136,200	41.7	5,684,200	21,701,200
Mitchell	194,000	186,300	40.9	7,610,400	29,055,200
Osborne	154,000	146,600	35.0	5,126,300	19,571,300
Ottawa	162,000	156,500	34.4	5,378,900	20,535,700
Phillips	114,000	108,900	44.4	4,838,900	18,474,000
Republic	117,000	108,900	38.3	4,168,000	15,912,700
Rooks	129,000	122,600	38.4	4,702,900	17,954,800
Smith	132,000	125,700	48.1	6,051,200	23,102,400
Washington	116,000	107,800	36.2	3,897,100	14,878,400
District total	1,545,000	1,465,000	38.2	55,963,000	216,710,900
Central District:					
Barton	246,000	229,400	28.4	6,521,100	25,511,900
Dickinson	199,000	191,100	31.8	6,072,700	23,757,700
Ellis	142,000	133,800	33.5	4,481,000	17,530,600
Ellsworth	126,000	121,800	32.1	3,914,400	15,314,000
Lincoln	144,000	139,200	38.1	5,304,100	20,750,800
McPherson	260,000	245,400	35.2	8,636,900	33,789,500
Marion	166,000	154,900	29.8	4,614,200	18,051,700
Rice	208,000	198,200	33.3	6,603,400	25,833,900
Rush	170,000	162,600	34.6	5,628,200	22,018,700
Russell	139,000	132,500	35.3	4,678,000	18,301,300
Saline	175,000	166,100	32.6	5,421,000	21,208,100
District total	1,975,000	1,875,000	33.0	61,875,000	242,068,200

WHEAT, 1980—*Concluded*

County	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
South Central District:					
Barber	215,000	187,800	27.5	5,157,300	20,176,500
Comanche	118,000	94,600	22.8	2,157,800	8,441,800
Edwards	118,000	108,600	28.8	3,133,100	12,257,400
Harper	315,000	296,000	33.0	9,772,800	38,233,400
Harvey	146,000	132,700	32.5	4,312,600	16,871,900
Kingman	250,000	212,100	27.3	5,785,700	22,634,900
Kiowa	109,000	88,000	32.1	2,824,300	11,049,300
Pawnee	190,000	171,400	33.8	5,785,200	22,633,000
Pratt	201,000	161,600	25.1	4,053,000	15,856,200
Reno	341,000	284,100	25.6	7,278,900	28,476,700
Sedgwick	262,000	240,500	33.2	7,988,300	31,252,000
Stafford	181,000	146,800	30.5	4,478,800	17,522,100
Sumner	504,000	470,800	32.1	15,122,200	59,161,300
District total	2,950,000	2,595,000	30.0	77,850,000	304,566,500
Northeast District:					
Atchison	16,400	15,700	33.1	519,800	2,111,300
Brown	48,000	46,400	48.8	2,264,100	9,196,400
Doniphan	19,000	18,300	47.8	874,900	3,553,700
Jackson	28,900	27,700	38.8	1,075,500	4,368,500
Jefferson	18,600	16,200	37.2	603,000	2,449,300
Leavenworth	17,000	15,800	34.4	543,200	2,206,400
Marshall	101,000	94,800	37.6	3,564,600	14,478,900
Nemaha	50,000	48,100	37.4	1,798,100	7,303,600
Pottawatomie	29,900	28,200	38.9	1,096,600	4,454,200
Riley	34,400	32,100	32.6	1,048,000	4,256,800
Wyandotte	1,800	1,700	39.5	67,200	273,000
District total	365,000	345,000	39.0	13,455,000	54,652,100
East Central District:					
Anderson	36,000	35,000	42.6	1,491,400	5,968,300
Chase	28,000	27,500	34.3	942,000	3,769,700
Coffey	38,900	38,100	36.2	1,377,700	5,513,300
Douglas	20,600	17,600	34.9	614,800	2,460,300
Franklin	25,000	23,800	37.3	887,700	3,552,400
Geary	28,000	26,600	38.3	1,019,500	4,079,800
Johnson	12,000	11,300	35.6	402,400	1,610,300
Linn	26,000	25,400	43.1	1,093,900	4,377,600
Lyon	39,900	38,500	41.4	1,595,600	6,385,300
Miami	18,300	17,900	39.7	710,400	2,842,900
Morris	65,000	62,800	33.8	2,120,100	8,484,300
Osage	36,000	35,300	38.1	1,345,100	5,382,800
Shawnee	28,300	27,600	40.0	1,104,300	4,419,200
Wabaunsee	23,000	22,600	38.7	875,100	3,502,000
District total	425,000	410,000	38.0	15,580,000	62,348,200
Southeast District:					
Allen	37,000	36,200	40.5	1,466,400	5,795,200
Bourbon	23,000	22,300	35.5	792,200	3,130,800
Butler	100,000	92,000	33.2	3,057,300	12,082,500
Chautauqua	18,000	16,900	44.4	749,800	2,963,200
Cherokee	94,000	91,100	42.0	3,826,400	15,122,000
Cowley	157,000	153,000	40.7	6,224,200	24,598,200
Crawford	37,000	35,300	37.2	1,313,500	5,191,000
Elk	20,000	18,600	35.5	661,000	2,612,300
Greenwood	21,000	20,100	39.2	788,400	3,115,800
Labette	72,000	70,200	37.9	2,658,600	10,506,900
Montgomery	60,000	57,500	41.7	2,397,300	9,474,200
Neosho	40,000	38,900	40.0	1,554,300	6,142,600
Wilson	49,000	47,900	42.7	2,043,600	8,076,400
Woodson	22,000	20,000	41.7	834,000	3,296,000
District total	750,000	720,000	39.4	28,367,000	112,107,100
State	13,000,000	12,000,000	35.0	420,000,000	1,617,000,000

WHEAT BY CROPPING PRACTICES, 1979

County	Grown on Irrigated Land				Grown on Summer Fallow [1]			
	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels
Northwest District:								
Cheyenne	5,000	4,700	35.8	168,100	141,900	119,100	27.7	3,304,100
Decatur	400	300	53.7	16,100	127,200	115,700	39.7	4,595,300
Graham	2,000	2,000	54.5	109,000	118,000	112,100	39.0	4,374,000
Norton	500	400	53.5	21,400	123,400	107,300	39.7	4,261,700
Rawlins	800	700	53.7	37,600	148,400	116,300	37.0	4,305,800
Sheridan	700	600	53.7	32,200	119,500	102,500	43.3	4,439,300
Sherman	8,200	7,700	53.8	414,300	189,800	167,700	32.5	5,455,700
Thomas	5,200	5,100	51.6	263,300	250,800	217,900	44.2	9,633,100
District total	22,800	21,500	49.4	1,062,000	1,219,000	1,058,600	38.1	40,369,000
West Central Dist.:								
Gove	2,300	2,200	55.0	120,900	138,300	68,200	38.2	2,608,200
Greeley	2,400	2,400	49.0	117,600	197,200	174,500	28.9	5,048,200
Lane	4,100	4,000	53.1	212,500	140,400	74,100	38.7	2,868,100
Logan	1,600	1,600	45.9	73,500	138,900	116,200	39.8	4,629,500
Ness	2,000	1,900	57.3	108,800	181,300	113,600	30.1	3,414,300
Scott	21,500	19,300	47.9	925,300	121,500	83,200	37.4	3,115,400
Trego	100	100	46.0	4,600	114,100	85,800	34.8	2,990,000
Wallace	15,300	12,100	44.9	543,800	87,500	71,900	26.4	1,895,400
Wichita	30,100	26,900	41.6	1,120,000	94,600	86,500	26.5	2,288,900
District total	79,400	70,500	45.8	3,227,000	1,213,800	874,000	33.0	28,858,000
Southwest District:								
Clark	2,200	2,200	44.0	96,800	58,500	48,400	38.8	1,877,600
Finney	56,000	54,000	49.3	2,662,300	188,000	148,000	34.5	5,100,900
Ford	11,800	11,600	50.4	584,400	196,100	178,100	39.3	6,998,500
Grant	32,200	32,000	58.0	1,856,000	52,600	28,300	34.2	968,100
Gray	48,800	46,100	45.3	2,087,500	106,100	84,400	40.3	3,401,400
Hamilton	6,600	5,900	41.0	241,900	188,600	166,600	26.1	4,343,800
Haskell	57,200	40,400	56.4	2,277,700	38,200	10,600	33.6	355,800
Hodgeman	4,700	4,700	51.4	241,500	128,500	123,300	42.5	5,241,700
Kearny	24,900	24,900	46.0	1,145,500	153,800	127,800	29.7	3,795,100
Meade	18,600	13,100	52.4	686,200	125,000	108,800	38.2	4,155,100
Morton	21,000	16,800	50.0	839,700	73,500	40,900	30.3	1,237,300
Seward	22,500	22,000	56.4	1,240,300	52,400	48,100	41.5	1,996,500
Stanton	41,400	34,600	51.2	1,771,000	97,600	74,800	34.8	2,604,900
Stevens	34,300	28,200	48.5	1,367,200	54,100	36,700	38.3	1,405,300
District total	382,200	336,500	50.8	17,098,000	1,513,000	1,224,800	35.5	43,482,000
North Central Dist.:								
Clay	100	100	40.0	4,000	25,000	24,100	37.3	898,900
Cloud	100	100	44.0	4,400	31,200	31,200	45.0	1,404,600
Jewell	500	500	44.4	22,200	45,300	44,100	38.0	1,675,800
Mitchell	...	...	...	...	60,100	59,400	44.0	2,614,500
Osborne	900	900	41.0	36,900	83,700	82,500	40.3	3,325,200
Ottawa	...	...	...	...	19,400	19,200	45.3	870,100
Phillips	...	...	...	...	94,200	91,500	40.7	3,724,700
Republic	1,200	1,200	40.9	49,100	28,000	27,100	38.8	1,051,500
Rooks	100	100	54.0	5,400	121,500	117,400	41.0	4,814,400
Smith	500	500	44.0	22,000	86,300	85,500	40.4	3,454,700
Washington	...	...	...	...	30,300	30,000	46.0	1,380,600
District total	3,400	3,400	42.4	144,000	625,000	612,000	41.2	25,215,000
Central District:								
Barton	5,000	5,000	48.6	243,000	115,700	108,600	31.3	3,397,900
Dickinson	700	700	55.1	38,600	33,400	32,400	41.6	1,346,300
Ellis	100	100	60.0	6,000	116,000	108,700	34.0	3,693,400
Ellsworth	200	200	51.0	10,200	49,800	48,600	40.5	1,966,100
Lincoln	...	...	...	...	49,200	48,300	41.4	1,997,300
McPherson	1,000	1,000	49.1	49,100	42,600	41,400	47.3	1,959,500
Marion	700	700	49.1	34,400	20,900	18,900	35.4	668,600
Rice	...	...	...	...	69,200	66,600	45.9	3,059,300
Rush	1,700	1,700	47.8	81,200	132,300	125,600	38.1	4,789,600
Russell	...	...	...	...	82,300	79,500	42.3	3,366,700
Saline	1,800	1,700	49.1	83,500	32,800	32,000	46.1	1,476,300
District total	11,200	11,100	49.2	546,000	744,200	710,600	39.0	27,721,000

WHEAT BY CROPPING PRACTICES, 1979—*Concluded*

County	Grown on Irrigated Land				Grown on Summer Fallow[1]			
	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels
South Central Dist.:								
Barber	200	200	43.0	8,600	14,700	12,500	41.3	516,100
Comanche	1,100	1,000	49.5	49,500	46,000	44,700	37.9	1,694,200
Edwards	5,300	4,800	41.8	200,400	69,400	66,400	35.7	2,373,000
Harper	300	300	42.7	12,800	24,000	21,200	41.1	871,000
Harvey	900	900	46.8	42,100	24,400	21,500	46.4	996,700
Kingman	2,200	1,500	43.0	64,500	29,000	28,000	41.7	1,167,100
Kiowa	6,400	6,400	41.8	267,700	81,000	73,100	37.8	2,763,400
Pawnee	14,800	14,800	42.7	632,300	153,200	146,400	34.6	5,068,300
Pratt	7,900	7,900	41.7	329,600	85,000	82,800	41.5	3,434,900
Reno	1,800	1,700	49.7	84,500	60,000	58,000	41.2	2,388,700
Sedgwick					43,000	41,700	44.6	1,858,500
Stafford	10,100	7,600	48.4	367,800	67,300	63,700	43.6	2,775,600
Sumner	1,000	900	45.8	41,200	76,000	73,000	45.0	3,282,500
District total	52,000	48,000	43.8	2,101,000	773,000	733,000	39.8	29,190,000
Northeast District:								
Atchison								
Brown								
Doniphan								
Jackson								
Jefferson								
Leavenworth								
Marshall								
Nemaha								
Pottawatomie								
Riley								
Wyandotte								
District total								
East Central Dist:								
Anderson								
Chase								
Coffey								
Douglas								
Franklin								
Geary								
Johnson								
Linn								
Lyon								
Miami								
Morris								
Osage								
Shawnee								
Wabaunsee								
District total								
Southeast District:								
Allen								
Bourbon								
Butler								
Chautauqua								
Cherokee								
Cowley								
Crawford								
Elk								
Greenwood								
Labette								
Montgomery								
Neosho								
Wilson								
Woodson								
District total								
State	551,000	491,000	49.2	24,178,000	6,088,000	5,213,000	37.4	194,835,000

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[1] No estimates of acres grown on summer fallow have been made for the eastern part of the state where this practice is relatively unimportant.

WHEAT BY CROPPING PRACTICES, 1979

County	Grown on Continuous Cropped Land			
	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels
Northwest District:				
Cheyenne	1,100	1,000	27.7	27,700
Decatur	1,400	1,400	35.9	50,200
Graham	10,000	10,000	36.8	368,400
Norton	5,100	4,800	35.3	169,200
Rawlins	3,800	3,400	35.9	122,200
Sheridan	1,800	1,600	35.9	57,500
Sherman	1,000	800	29.3	23,400
Thomas	1,000	900	36.0	32,400
District total	25,200	23,900	35.6	851,000
West Central Dist.:				
Gove	400	300	30.7	9,200
Greeley	400	400	30.5	12,200
Lane	500	400	30.5	12,200
Logan	11,500	9,200	31.5	289,800
Ness	3,700	1,800	30.5	54,900
Scott	1,000	500	26.6	13,300
Trego	6,800	5,400	32.4	175,000
Wallace	200	200	29.5	5,900
Wichita	7,300	3,300	27.1	89,500
District total	31,800	21,500	30.8	662,000
Southwest District:				
Clark	46,300	34,800	37.5	1,303,800
Finney	6,000	3,900	32.4	126,300
Ford	18,100	15,200	36.3	551,300
Grant	4,200	3,200	36.1	115,400
Gray	8,100	4,100	29.5	120,900
Hamilton	1,800	1,300	27.2	35,400
Haskell	9,600	6,200	32.7	202,600
Hodgeman	14,800	10,400	42.8	444,600
Kearny	1,300	900	34.4	31,000
Meade	6,400	4,500	30.5	137,200
Morton	2,500	1,600	36.6	58,500
Seward	7,100	6,500	36.0	233,800
Stanton	10,000	7,400	31.9	236,000
Stevens	8,600	4,700	27.7	130,200
District total	144,800	104,700	35.6	3,727,000
North Central Dist.:				
Clay	77,900	75,200	31.3	2,353,000
Cloud	114,700	112,800	37.1	4,181,500
Jewell	81,200	80,400	34.4	2,764,100
Mitchell	145,900	138,600	37.1	5,137,800
Osborne	59,400	58,200	38.9	2,263,000
Ottawa	128,600	125,000	40.2	5,019,900
Phillips	9,800	9,800	30.0	293,900
Republic	72,800	67,500	30.4	2,054,600
Rooks	4,400	3,600	30.6	110,100
Smith	32,200	30,100	40.0	1,202,800
Washington	75,700	72,400	35.9	2,597,300
District total	802,600	773,600	36.2	27,978,000
Central District:				
Barton	119,300	117,300	30.4	3,564,400
Dickinson	145,900	140,600	37.3	5,242,100
Ellis	17,900	15,400	25.5	392,500
Ellsworth	68,000	66,600	35.7	2,376,600
Lincoln	83,800	78,300	38.1	2,981,900
McPherson	187,400	181,200	37.6	6,810,200
Marion	143,400	138,200	33.6	4,641,500
Rice	132,800	129,700	37.0	4,796,800
Rush	19,000	18,300	35.6	651,200
Russell	48,700	46,300	37.8	1,749,400
Saline	131,400	129,400	40.3	5,208,400
District total	1,097,600	1,061,300	36.2	38,415,000

WHEAT BY CROPPING PRACTICES, 1979—*Concluded*

County	Grown on Continuous Cropped Land			
	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels
South Central Dist.:				
Barber	194,100	157,600	39.2	6,181,500
Comanche	73,900	61,100	38.6	2,360,000
Edwards	37,300	33,700	33.9	1,144,000
Harper	282,700	245,400	42.0	10,309,300
Harvey	112,700	107,600	35.9	3,866,900
Kingman	217,800	206,200	38.3	7,890,300
Kiowa	20,600	19,500	31.0	603,700
Pawnee	21,000	20,500	27.7	567,300
Pratt	94,100	90,500	34.5	3,126,200
Reno	275,200	258,200	34.2	8,842,100
Sedgwick	211,000	198,200	36.5	7,241,200
Stafford	96,600	85,100	37.4	3,185,400
Sumner	398,000	381,400	37.9	14,466,100
District total	2,035,000	1,865,000	37.4	69,784,000
Northeast District:				
Atchison	17,000	13,900	37.0	513,800
Brown	40,000	38,300	43.4	1,661,200
Doniphan	13,000	12,500	44.7	558,400
Jackson	23,000	22,000	33.6	738,200
Jefferson	15,000	13,700	38.1	521,500
Leavenworth	12,000	10,600	39.6	419,400
Marshall	94,000	86,700	39.8	3,447,800
Nemaha	34,000	32,300	38.6	1,245,700
Pottawatomie	26,000	24,800	42.4	1,050,800
Riley	30,000	28,200	32.1	903,900
Wyandotte	1,000	1,000	43.3	43,300
District total	305,000	284,000	39.1	11,104,000
East Central Dist.:				
Anderson	29,000	27,900	48.9	1,363,100
Chase	27,000	26,100	40.6	1,060,900
Coffey	35,000	32,100	41.0	1,317,600
Douglas	17,000	16,600	43.3	719,600
Franklin	20,000	19,700	44.2	871,800
Geary	24,000	22,600	44.6	1,006,900
Johnson	10,000	9,900	49.1	485,700
Linn	22,000	21,200	46.7	989,100
Lyon	34,000	32,100	38.6	1,240,500
Miami	16,000	15,600	45.3	705,900
Morris	55,000	52,000	39.1	2,035,600
Osage	28,000	27,500	41.6	1,145,300
Shawnee	21,000	20,400	38.8	792,500
Wabaunsee	21,000	20,300	38.5	782,500
District total	359,000	344,000	42.2	14,517,000
Southeast District:				
Allen	28,000	27,500	40.4	1,110,100
Bourbon	19,000	18,400	35.9	660,000
Butler	86,000	79,600	35.2	2,799,600
Chautauqua	16,000	13,500	37.7	508,500
Cherokee	83,000	81,200	40.5	3,285,900
Cowley	146,000	135,800	38.2	5,183,400
Crawford	34,000	31,600	39.2	1,237,700
Elk	16,000	13,800	36.6	504,700
Greenwood	16,000	14,500	42.8	620,100
Labette	66,000	59,100	43.1	2,545,100
Montgomery	54,000	51,000	41.2	2,099,500
Neosho	36,000	34,800	42.4	1,474,300
Wilson	42,000	39,900	40.2	1,602,700
Woodson	18,000	17,300	41.5	717,400
District total	660,000	618,000	39.4	24,349,000
State	5,461,000	5,096,000	37.6	191,387,000

WHEAT BY CROPPING PRACTICES, 1980

County	Grown on Irrigated Land				Grown on Summer Fallow[1]			
	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels
Northwest District:								
Cheyenne	4,000	4,000	55.4	221,500	158,300	151,400	42.2	6,386,500
Decatur	400	400	47.0	18,800	135,300	129,200	42.4	5,479,600
Graham					129,100	123,700	38.0	4,702,100
Norton	400	400	40.0	16,000	124,400	115,000	38.9	4,471,000
Rawlins	400	400	47.0	18,800	167,200	158,200	40.5	6,411,900
Sheridan	500	500	47.0	23,500	111,000	106,400	39.1	4,164,200
Sherman	24,300	23,300	44.5	1,036,100	186,000	171,100	39.2	6,699,700
Thomas	5,000	5,000	50.7	253,300	250,700	240,000	44.4	10,666,000
District total	35,000	34,000	46.7	1,588,000	1,262,000	1,195,000	41.0	48,981,000
West Central Dist.:								
Gove	1,200	1,000	40.4	40,400	138,600	130,800	40.6	5,316,100
Greeley	2,200	2,000	37.1	74,200	202,800	162,300	30.0	4,869,000
Lane	5,400	5,300	48.0	254,400	144,600	136,400	37.8	5,152,000
Logan	600	600	40.3	24,200	187,000	176,500	37.3	6,577,500
Ness	2,000	2,000	41.5	82,900	183,200	175,800	39.2	6,882,200
Scott	24,900	24,000	48.0	1,152,000	136,600	129,700	40.0	5,189,200
Trego	300	300	40.3	12,100	130,600	124,600	34.8	4,337,300
Wallace	14,200	11,400	40.0	456,000	98,800	80,000	33.7	2,697,700
Wichita	36,200	31,400	44.5	1,397,800	111,800	98,900	33.3	3,289,000
District total	87,000	78,000	44.8	3,494,000	1,334,000	1,215,000	36.5	44,310,000
Southwest District:								
Clark	1,000	1,000	40.0	40,000	73,500	61,100	25.0	1,527,500
Finney	45,000	45,000	49.0	2,205,000	233,500	214,000	32.2	6,891,900
Ford	10,100	8,700	39.4	342,500	216,500	192,400	27.1	5,207,300
Grant	44,100	43,300	48.0	2,078,300	51,500	48,300	32.6	1,574,200
Gray	55,000	51,000	41.1	2,095,800	128,100	118,200	33.6	3,968,200
Hamilton	8,800	8,400	37.0	310,800	195,200	181,500	31.5	5,725,400
Haskell	55,000	55,000	46.9	2,577,000	59,600	48,400	33.0	1,597,200
Hodgeman	8,300	7,600	38.0	288,800	121,400	108,400	32.6	3,535,100
Kearny	29,500	25,900	36.0	932,400	138,500	131,800	30.1	3,965,900
Meade	16,800	16,800	41.4	694,900	122,900	106,600	26.0	2,771,600
Morton	25,000	25,000	41.5	1,038,500	81,000	70,600	32.0	2,259,200
Seward	33,400	28,500	45.6	1,298,300	32,500	26,000	26.0	676,000
Stanton	42,000	41,800	48.1	2,010,500	111,900	105,800	34.5	3,646,300
Stevens	33,000	33,000	42.7	1,408,200	56,900	54,900	34.5	1,894,200
District total	407,000	391,000	44.3	17,321,000	1,623,000	1,468,000	30.8	45,240,000
North Central Dist.:								
Clay					31,700	29,500	36.3	1,069,500
Cloud					27,200	26,100	38.6	1,008,200
Jewell	400	400	49.0	19,600	33,900	31,500	49.0	1,543,500
Mitchell					90,000	86,100	44.4	3,826,000
Osborne	500	500	50.4	25,200	90,500	86,000	38.4	3,302,200
Ottawa					20,100	19,300	37.0	714,100
Phillips					89,300	85,400	46.3	3,950,600
Republic	1,700	1,700	46.1	78,300	38,700	37,100	44.6	1,656,000
Rooks	400	400	44.8	17,900	119,300	113,400	38.7	4,392,700
Smith					105,000	100,100	49.7	4,971,700
Washington					18,300	17,500	46.0	804,500
District total	3,000	3,000	47.0	141,000	664,000	632,000	43.1	27,239,000
Central District:								
Barton	5,000	5,000	39.1	195,500	99,300	91,600	31.8	2,910,000
Dickinson	300	300	44.7	13,400	24,300	23,300	31.7	738,600
Ellis	400	400	44.8	17,900	104,700	98,400	37.2	3,658,100
Ellsworth	300	300	44.7	13,400	50,500	48,500	34.1	1,651,800
Lincoln					29,200	28,000	44.3	1,239,100
McPherson	500	500	44.8	22,400	44,900	41,600	40.8	1,697,100
Marion	400	400	44.8	17,900	18,300	17,500	38.3	669,500
Rice	100	100	55.0	5,500	63,400	60,600	34.0	2,060,400
Rush	2,000	2,000	43.0	86,000	135,800	129,900	37.5	4,866,800
Russell					84,300	81,100	39.5	3,200,600
Saline	1,000	1,000	49.0	49,000	16,300	15,500	46.0	713,000
District total	10,000	10,000	42.1	421,000	671,000	636,000	36.8	23,405,000

WHEAT BY CROPPING PRACTICES, 1980—*Concluded*

County	Grown on Irrigated Land				Grown on Summer Fallow [1]			
	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels
South Central Dist.:								
Barber	1,000	1,000	43.3	43,300	7,400	7,200	28.2	203,200
Comanche	1,900	1,600	43.3	69,200	17,700	14,200	25.0	355,000
Edwards	5,700	5,500	41.0	225,200	86,800	80,800	29.9	2,417,300
Harper					25,000	24,100	34.0	819,400
Harvey	500	400	43.3	17,300	19,000	17,600	38.0	668,800
Kingman	2,500	2,000	47.2	94,300	20,000	19,200	32.4	621,500
Kiowa	9,600	7,700	45.0	346,500	70,000	56,000	34.7	1,943,200
Pawnee	17,000	15,600	43.1	671,900	132,700	118,600	34.1	4,045,100
Pratt	9,400	8,200	41.3	338,900	71,200	57,000	26.3	1,497,900
Reno	1,000	1,000	40.0	40,000	45,300	36,300	30.3	1,098,900
Sedgwick					40,400	37,000	39.0	1,443,000
Stafford	11,400	11,000	46.7	513,400	62,800	50,300	33.2	1,670,000
Sumner					73,700	69,700	38.4	2,679,700
District total	60,000	54,000	43.7	2,360,000	672,000	588,000	33.1	19,463,000
Northeast District:								
Atchison								
Brown								
Doniphan								
Jackson								
Jefferson								
Leavenworth								
Marshall								
Nemaha								
Pottawatomie								
Riley								
Wyandotte								
District total								
East Central Dist.:								
Anderson								
Chase								
Coffey								
Douglas								
Franklin								
Geary								
Johnson								
Linn								
Lyon								
Miami								
Morris								
Osage								
Shawnee								
Wabaunsee								
District total								
Southeast District:								
Allen								
Bourbon								
Butler								
Chautauqua								
Cherokee								
Cowley								
Crawford								
Elk								
Greenwood								
Labette								
Montgomery								
Neosho								
Wilson								
Woodson								
District total								
State	602,000	570,000	44.4	25,325,000	6,226,000	5,734,000	36.4	208,638,000

[1] No estimate of acres grown on summer fallow have been made for the eastern third of the state where this practice is relatively unimportant.

WHEAT BY CROPPING PRACTICES, 1980

	Grown on Continuous Cropped Land			
County	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels
Northwest District:				
Cheyenne	700	700	28.3	19,800
Decatur	300	300	37.0	11,100
Graham	8,900	8,600	30.0	258,000
Norton	11,200	10,700	36.7	393,000
Rawlins	2,400	2,100	34.5	72,500
Sheridan	14,500	13,800	36.5	503,400
Sherman	700	600	28.0	16,800
Thomas	4,300	4,200	42.0	176,400
District total	43,000	41,000	35.4	1,451,000
West Central Dist.:				
Gove	11,200	10,200	36.8	375,200
Greeley	0	0	0.0	0
Lane	0	0	0.0	0
Logan	2,400	2,400	35.0	84,000
Ness	11,800	10,800	39.3	424,200
Scott	1,500	1,500	32.0	48,000
Trego	2,100	2,100	26.0	54,600
Wallace	0	0	0.0	0
Wichita	0	0	0.0	0
District total	29,000	27,000	36.5	986,000
Southwest District:				
Clark	28,500	22,800	20.0	456,000
Finney	3,500	3,100	29.8	92,400
Ford	12,400	10,300	24.4	251,600
Grant	9,400	7,900	32.1	253,800
Gray	4,900	4,300	24.0	103,200
Hamilton	1,000	900	25.8	23,200
Haskell	11,400	9,900	30.0	297,000
Hodgeman	13,300	10,800	29.8	322,200
Kearny	0	0	0.0	0
Meade	15,300	12,300	19.7	242,100
Morton	9,000	7,900	30.0	237,000
Seward	33,100	26,500	22.4	592,500
Stanton	15,100	13,700	28.0	382,900
Stevens	13,100	10,600	26.9	285,100
District total	170,000	141,000	25.1	3,539,000
North Central Dist.:				
Clay	85,300	78,300	30.9	2,422,700
Cloud	135,800	131,600	30.4	4,004,700
Jewell	112,700	104,300	39.5	4,121,100
Mitchell	104,000	100,200	37.8	3,784,400
Osborne	63,000	60,100	29.9	1,798,900
Ottawa	141,900	137,200	34.0	4,664,800
Phillips	24,700	23,500	37.8	888,300
Republic	76,600	70,100	34.7	2,433,700
Rooks	9,300	8,800	33.2	292,300
Smith	27,000	25,600	42.2	1,079,500
Washington	97,700	90,300	34.3	3,092,600
District total	878,000	830,000	34.4	28,583,000
Central District:				
Barton	141,700	132,800	25.7	3,415,600
Dickinson	174,400	167,500	31.8	5,320,700
Ellis	36,900	35,000	23.0	805,000
Ellsworth	75,200	73,000	30.8	2,249,200
Lincoln	114,800	111,200	36.6	4,065,000
McPherson	214,600	203,300	34.0	6,917,400
Marion	147,300	137,000	28.7	3,926,800
Rice	144,500	137,500	33.0	4,537,500
Rush	32,200	30,700	22.0	675,400
Russell	54,700	51,400	28.7	1,477,400
Saline	157,700	149,600	31.1	4,659,000
District total	1,294,000	1,229,000	31.0	38,049,000

WHEAT BY CROPPING PRACTICES, 1980—*Concluded*

County	Grown on Continuous Cropped Land			
	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels
South Central Dist.:				
Barber	206,600	179,600	27.3	4,910,800
Comanche	98,400	78,800	22.0	1,733,600
Edwards	25,500	22,300	22.0	490,600
Harper	290,000	271,900	32.9	8,953,400
Harvey	126,500	114,700	31.6	3,626,500
Kingman	227,500	190,900	26.6	5,069,900
Kiowa	29,400	24,300	22.0	534,600
Pawnee	40,300	37,200	28.7	1,068,200
Pratt	120,400	96,400	23.0	2,216,200
Reno	294,700	246,800	24.9	6,140,000
Sedgwick	221,600	203,500	32.2	6,545,300
Stafford	106,800	85,500	26.9	2,295,400
Sumner	430,300	401,100	31.0	12,442,500
District total	2,218,000	1,953,000	28.7	56,027,000
Northeast District:				
Atchison	16,400	15,700	33.1	519,800
Brown	48,000	46,400	48.8	2,264,100
Doniphan	19,000	18,300	47.8	874,900
Jackson	28,900	27,700	38.8	1,075,500
Jefferson	18,600	16,200	37.2	603,000
Leavenworth	17,000	15,800	34.4	543,200
Marshall	101,000	94,800	37.6	3,564,600
Nemaha	50,000	48,100	37.4	1,798,100
Pottawatomie	29,900	28,200	38.9	1,096,600
Riley	34,400	32,100	32.7	1,048,000
Wyandotte	1,800	1,700	39.5	67,200
District total	365,000	345,000	39.0	13,455,000
East Central Dist:				
Anderson	36,000	35,000	42.6	1,491,400
Chase	28,000	27,500	34.3	942,000
Coffey	38,900	38,100	36.2	1,377,700
Douglas	20,600	17,600	34.9	614,800
Franklin	25,000	23,800	37.3	887,700
Geary	28,000	26,600	38.3	1,019,500
Johnson	12,000	11,300	35.6	402,400
Linn	26,000	25,400	43.1	1,093,900
Lyon	39,900	38,500	41.4	1,595,600
Miami	18,300	17,900	39.7	710,400
Morris	65,000	62,800	33.8	2,120,100
Osage	36,000	35,300	38.1	1,345,100
Shawnee	28,300	27,600	40.0	1,104,300
Wabaunsee	23,000	22,600	38.7	875,100
District total	425,000	410,000	38.0	15,580,000
Southeast District:				
Allen	37,000	36,200	40.5	1,466,400
Bourbon	23,000	22,300	35.5	792,200
Butler	100,000	92,000	33.2	3,057,300
Chautauqua	18,000	16,900	44.4	749,800
Cherokee	94,000	91,100	42.0	3,826,400
Cowley	157,000	153,000	40.7	6,224,200
Crawford	37,000	35,300	37.2	1,313,500
Elk	20,000	18,600	35.5	661,000
Greenwood	21,000	20,100	39.2	788,400
Labette	72,000	70,200	37.9	2,658,600
Montgomery	60,000	57,500	41.7	2,397,300
Neosho	40,000	38,900	40.0	1,554,300
Wilson	49,000	47,900	42.7	2,043,600
Woodson	22,000	20,000	41.7	834,000
District total	750,000	720,000	39.4	28,367,000
State	6,172,000	5,696,000	32.7	186,037,000

SORGHUM, 1979

County	All Sorghum		Sorghum for Grain			
	Acres planted	Acres harvested	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
Northwest District:						
Cheyenne	13,200	12,900	5,800	51.9	301,000	621,500
Decatur	36,000	36,000	24,000	59.3	1,422,200	2,936,700
Graham	33,200	33,200	10,100	63.4	640,700	1,323,000
Norton	36,500	36,500	19,600	64.8	1,269,800	2,622,000
Rawlins	29,900	29,900	15,500	61.3	950,900	1,963,500
Sheridan	33,700	33,700	15,500	81.9	1,270,200	2,622,800
Sherman	11,500	11,500	9,200	81.6	751,100	1,550,900
Thomas	29,000	29,000	23,300	74.1	1,726,400	3,564,800
District total	223,000	222,700	123,000	67.7	8,332,300	17,205,200
West Central District:						
Gove	68,000	68,000	44,600	50.9	2,269,300	4,844,900
Greeley	11,300	9,800	4,500	63.2	284,300	607,000
Lane	55,000	51,800	47,400	56.8	2,692,700	5,748,700
Logan	16,100	16,100	11,500	49.3	566,400	1,209,300
Ness	48,400	48,400	33,700	49.5	1,668,000	3,561,200
Scott	42,000	41,600	33,700	77.9	2,625,800	5,606,100
Trego	49,800	49,800	26,800	55.4	1,485,000	3,170,500
Wallace	5,900	5,700	3,100	86.2	267,100	570,300
Wichita	25,500	25,100	19,700	81.1	1,597,700	3,411,100
District total	322,000	316,300	225,000	59.8	13,456,300	28,729,100
Southwest District:						
Clark	12,000	11,900	3,500	49.0	171,400	383,100
Finney	71,000	70,300	65,000	83.0	5,394,200	12,057,100
Ford	39,900	39,900	20,800	93.6	1,946,100	4,349,900
Grant	88,000	86,700	77,000	55.0	4,231,800	9,458,900
Gray	40,700	40,200	33,600	81.8	2,749,400	6,145,500
Hamilton	20,000	19,700	12,900	55.7	718,400	1,605,800
Haskell	43,900	43,300	40,900	69.9	2,858,500	6,389,300
Hodgeman	18,300	18,300	12,200	70.8	864,000	1,931,200
Kearny	25,700	24,900	21,700	54.5	1,183,700	2,645,800
Meade	49,500	49,500	40,800	92.1	3,758,500	8,401,000
Morton	113,000	111,400	105,000	58.0	6,092,100	13,617,100
Seward	68,000	66,800	65,000	64.9	4,219,800	9,432,100
Stanton	53,000	52,300	49,900	60.4	3,014,600	6,738,200
Stevens	184,000	181,900	175,700	50.6	8,884,700	19,859,300
District total	827,000	817,100	724,000	63.7	46,087,200	103,014,300
North Central District:						
Clay	56,000	55,400	47,700	65.5	3,122,900	6,792,500
Cloud	49,000	48,900	39,900	72.6	2,897,100	6,301,400
Jewell	87,000	86,400	77,000	71.9	5,539,400	12,048,600
Mitchell	44,500	43,800	40,600	64.4	2,615,100	5,688,000
Osborne	40,400	40,400	21,000	77.2	1,620,400	3,524,500
Ottawa	30,000	30,000	20,000	57.9	1,158,800	2,520,500
Phillips	47,000	47,000	27,600	62.7	1,731,800	3,766,800
Republic	83,000	82,600	74,000	74.0	5,473,400	11,905,100
Rooks	35,100	35,100	18,900	58.9	1,113,400	2,421,700
Smith	68,000	67,400	41,300	72.8	3,005,800	6,537,800
Washington	108,000	107,200	100,000	78.9	7,886,800	17,154,500
District total	648,000	644,200	508,000	71.2	36,164,900	78,661,400
Central District:						
Barton	43,400	42,500	37,900	61.7	2,336,600	5,176,000
Dickinson	74,000	72,200	57,000	59.0	3,362,700	7,448,900
Ellis	27,700	27,700	13,900	54.8	761,800	1,687,500
Ellsworth	23,600	23,600	17,800	47.6	847,300	1,876,900
Lincoln	27,500	27,500	19,700	60.7	1,196,600	2,650,700
McPherson	78,000	76,800	72,000	67.4	4,853,400	10,751,000
Marion	88,000	87,200	79,200	61.2	4,843,500	10,729,200
Rice	65,000	64,100	60,000	60.1	3,607,700	7,991,700
Rush	25,000	25,000	14,200	74.2	1,054,100	2,335,000
Russell	29,500	29,500	12,700	49.0	622,100	1,378,100
Saline	28,300	27,900	25,600	59.0	1,510,100	3,345,100
District total	510,000	504,000	410,000	61.0	24,995,900	55,370,100

SORGHUM, 1979—*Concluded*

Counts	All Sorghum		Sorghum for Grain			
	Acres planted	Acres harvested	Acres harvested	Yield per acre bushels	Production bushels	Farm value dollars
South Central District						
Barber	17,200	15,300	2,500	60.4	151,100	339,300
Comanche	25,700	25,200	9,300	40.1	373,100	837,700
Edwards	33,400	32,800	28,800	72.7	2,094,500	4,702,700
Harper	11,000	11,000	2,900	50.3	145,900	327,800
Harvey	70,000	68,600	63,000	53.1	3,345,000	7,510,300
Kingman	28,100	28,100	16,500	48.8	805,200	1,807,900
Kiowa	30,700	30,100	19,300	58.1	1,120,800	2,516,500
Pawnee	38,100	38,100	32,100	67.2	2,157,000	4,843,000
Pratt	36,700	36,400	31,000	63.8	1,977,100	4,439,100
Reno	97,000	96,500	78,800	67.1	5,288,300	11,873,300
Sedgwick	80,000	78,700	71,000	47.2	3,352,800	7,527,900
Stafford	48,500	47,800	43,800	81.9	3,589,100	8,058,400
Sumner	29,600	28,500	20,000	43.5	869,200	1,951,600
District total	546,000	537,100	419,000	60.3	25,269,100	56,735,300
Northeast District						
Atchison	39,600	38,700	36,500	85.5	3,119,100	6,940,600
Brown	44,900	44,100	43,600	89.8	3,914,100	8,709,600
Doniphan	11,500	11,100	10,900	97.1	1,058,200	2,354,700
Jackson	38,500	37,800	35,100	76.4	2,683,100	5,970,400
Jefferson	29,000	28,300	27,900	87.5	2,440,500	5,430,600
Leavenworth	24,200	23,700	16,100	73.5	1,182,700	2,631,700
Marshall	113,000	112,100	105,200	80.3	8,451,700	18,806,500
Nemaha	94,000	92,500	85,000	80.5	6,842,400	15,225,600
Pottawatomie	42,800	42,100	40,300	90.0	3,625,700	8,067,900
Riley	36,900	36,100	31,800	83.7	2,660,800	5,920,800
Wyandotte	1,600	1,600	1,600	76.9	123,100	273,900
District total	476,000	468,100	434,000	83.2	36,101,400	80,332,300
East Central District						
Anderson	22,200	21,600	21,600	81.3	1,756,300	3,802,500
Chase	12,600	12,200	11,600	76.0	881,700	1,908,900
Coffey	29,500	28,900	26,600	77.9	2,071,300	4,484,500
Douglas	24,600	24,000	23,400	87.9	2,056,200	4,451,800
Franklin	21,300	20,700	19,400	82.8	1,606,600	3,478,400
Geary	13,200	12,800	12,100	76.8	928,800	2,010,900
Johnson	12,900	12,600	12,000	98.9	1,186,900	2,569,700
Linn	23,200	22,800	21,200	72.3	1,532,300	3,317,500
Lyon	53,000	52,400	47,900	77.7	3,723,400	8,061,400
Miami	24,900	24,300	24,200	86.1	2,084,500	4,513,100
Morris	41,600	40,700	37,600	74.3	2,794,600	6,050,500
Osage	52,000	51,200	48,400	85.6	4,144,900	8,974,000
Shawnee	30,200	29,600	28,800	82.2	2,367,200	5,125,100
Wabaunsee	29,800	29,200	27,200	78.1	2,125,300	4,601,400
District total	391,000	383,000	362,000	80.8	29,260,000	63,349,700
Southeast District						
Allen	24,800	24,200	23,600	79.1	1,866,700	4,097,700
Bourbon	21,100	20,600	18,800	65.8	1,236,100	2,713,400
Butler	93,000	92,000	84,000	70.4	5,912,900	12,979,600
Chautauqua	5,600	5,400	5,400	73.3	395,800	868,800
Cherokee	18,500	17,900	17,900	80.3	1,437,000	3,154,400
Cowley	32,300	31,000	27,200	56.7	1,542,500	3,386,000
Crawford	33,000	32,500	32,000	80.9	2,589,600	5,684,500
Elk	14,000	13,300	8,900	62.4	555,400	1,219,200
Greenwood	22,200	21,900	18,700	69.5	1,300,000	2,853,700
Labette	29,300	28,800	26,100	73.6	1,919,800	4,214,200
Montgomery	34,000	32,700	28,600	69.8	1,996,800	4,383,200
Neosho	27,200	26,600	24,500	78.2	1,915,800	4,205,400
Wilson	31,100	30,300	29,200	82.1	2,398,300	5,264,600
Woodson	20,900	20,300	20,100	79.4	1,596,200	3,503,900
District total	407,000	397,500	365,000	73.0	26,662,900	58,528,600
State	4,350,000	4,290,000	3,570,000	69.0	246,330,000	541,926,000

SORGHUM, 1980

County	All Sorghum		Sorghum for Grain			
	Acres planted	Acres harvested	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
Northwest District:						
Cheyenne	12,200	12,000	6,800	69.4	472,200	1,292,500
Decatur	34,800	33,900	23,400	37.9	887,500	2,429,300
Graham	26,800	26,600	12,700	32.9	417,500	1,142,800
Norton	37,100	36,400	24,700	37.4	924,800	2,531,400
Rawlins	23,000	22,900	14,000	62.7	878,000	2,403,300
Sheridan	31,600	31,000	15,100	66.7	1,006,900	2,756,100
Sherman	14,400	14,300	10,400	78.9	820,200	2,245,100
Thomas	29,100	28,500	19,100	57.4	1,096,500	3,001,500
District total	209,000	205,600	126,200	51.5	6,503,600	17,802,000
West Central District:						
Gove	45,000	44,200	21,900	53.5	1,172,400	3,302,900
Greeley	16,900	16,700	12,200	45.3	552,300	1,555,900
Lane	30,000	29,300	24,600	52.9	1,302,400	3,669,100
Logan	11,100	10,600	7,000	44.4	310,600	875,000
Ness	24,300	23,900	18,000	49.6	892,100	2,513,200
Scott	34,700	34,000	29,100	63.5	1,848,200	5,206,700
Trego	37,400	36,700	17,000	44.8	761,600	2,145,600
Wallace	13,400	13,100	8,700	80.6	701,100	1,975,100
Wichita	28,200	27,600	24,300	81.1	1,971,000	5,552,600
District total	241,000	236,100	162,800	58.4	9,511,700	26,796,100
Southwest District:						
Clark	13,500	12,700	4,700	42.0	197,300	585,400
Finney	77,000	76,300	67,300	70.8	4,766,800	14,143,100
Ford	51,000	51,000	43,200	75.5	3,259,700	9,671,500
Grant	78,000	76,600	72,200	56.9	4,106,300	12,183,400
Gray	47,000	45,800	43,300	71.7	3,104,300	9,210,500
Hamilton	28,000	26,400	15,000	59.7	895,500	2,657,000
Haskell	51,000	49,900	47,800	79.7	3,808,700	11,300,400
Hodgeman	20,900	20,100	15,500	61.8	958,400	2,843,600
Kearny	24,200	24,000	19,600	72.3	1,417,200	4,204,800
Meade	69,000	68,600	63,500	88.5	5,617,200	16,666,200
Morton	109,000	107,100	100,700	38.9	3,917,900	11,624,400
Seward	96,000	94,400	91,700	56.4	5,171,100	15,342,700
Stanton	44,400	43,600	42,600	66.4	2,828,800	8,393,100
Stevens	213,000	210,300	206,700	44.9	9,277,800	27,527,200
District total	922,000	906,800	833,800	59.2	49,327,000	146,353,300
North Central District:						
Clay	56,000	42,600	29,400	24.2	710,200	2,043,300
Cloud	53,000	28,000	20,700	23.7	491,500	1,414,100
Jewell	79,000	71,200	60,400	43.6	2,632,300	7,573,500
Mitchell	55,000	40,000	26,800	24.5	655,300	1,885,400
Osborne	37,400	36,300	20,600	44.4	914,100	2,630,000
Ottawa	22,500	8,600	5,700	22.2	126,400	363,700
Phillips	49,000	48,300	29,100	39.7	1,155,900	3,325,700
Republic	91,000	84,200	75,900	28.9	2,196,300	6,319,000
Rooks	46,100	45,100	23,300	27.4	637,300	1,833,600
Smith	85,000	84,000	60,600	57.6	3,489,300	10,039,100
Washington	126,000	107,000	95,700	26.2	2,506,900	7,212,700
District total	700,000	595,300	448,200	34.6	15,515,500	44,640,100
Central District:						
Barton	50,000	46,900	42,900	59.9	2,569,400	7,572,100
Dickinson	76,000	56,100	39,900	19.4	775,900	2,286,600
Ellis	25,300	24,700	15,300	42.9	656,800	1,935,600
Ellsworth	27,300	27,200	19,900	29.3	582,400	1,716,400
Lincoln	26,400	23,000	16,100	26.2	421,700	1,242,800
McPherson	89,000	70,300	62,900	37.5	2,359,400	6,953,200
Marion	114,000	102,200	74,200	16.6	1,229,400	3,623,100
Rice	80,000	70,300	65,800	46.3	3,049,600	8,987,200
Rush	23,400	22,900	15,900	56.5	898,000	2,646,400
Russell	34,600	34,100	19,100	34.7	663,600	1,955,700
Saline	26,000	10,600	7,300	28.0	204,300	602,100
District total	572,000	488,300	379,300	35.4	13,410,500	39,521,200

SORGHUM, 1980—*Concluded*

County	All Sorghum		Sorghum for Grain			
	Acres planted	Acres harvested	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
South Central District:						
Barber	23,300	23,000	2,000	50.4	100,700	300,800
Comanche	27,800	25,500	8,200	41.6	341,500	1,020,100
Edwards	46,100	45,100	39,300	60.8	2,389,000	7,135,900
Harper	13,200	13,000	7,900	39.5	312,300	932,800
Harvey	91,000	84,200	73,800	26.8	1,975,700	5,901,400
Kingman	30,600	29,400	14,600	48.2	703,100	2,100,100
Kiowa	40,000	39,200	32,500	50.8	1,652,200	4,935,100
Pawnee	46,900	46,600	42,000	64.7	2,717,300	8,116,500
Pratt	55,000	54,000	49,900	46.8	2,335,500	6,976,100
Reno	111,000	105,900	95,100	53.9	5,121,900	15,298,900
Sedgwick	97,000	90,600	80,300	35.2	2,824,600	8,437,000
Stafford	69,000	64,600	57,900	61.4	3,555,700	10,620,800
Sumner	37,100	32,400	19,400	28.1	545,200	1,628,500
District total	688,000	653,500	522,900	47.0	24,574,700	73,404,000
Northeast District:						
Atchison	39,100	39,100	37,400	60.7	2,271,800	6,695,100
Brown	46,200	45,500	42,900	55.0	2,359,100	6,952,400
Doniphan	10,600	10,500	10,200	81.6	831,900	2,451,700
Jackson	34,700	34,300	32,500	33.9	1,101,400	3,245,900
Jefferson	21,800	21,400	20,700	50.9	1,054,100	3,106,500
Leavenworth	21,800	21,800	17,900	57.9	1,035,700	3,052,300
Marshall	125,000	123,000	116,600	28.3	3,299,100	9,722,600
Nemaha	107,000	106,100	96,600	41.3	3,992,300	11,765,400
Pottawatomie	54,000	53,000	51,500	42.7	2,197,500	6,476,200
Riley	41,500	39,500	33,700	24.9	840,200	2,476,100
Wyandotte	1,300	1,300	1,300	41.3	53,700	158,300
District total	503,000	495,500	461,300	41.3	19,036,800	56,102,500
East Central District:						
Anderson	23,400	21,800	19,200	25.0	479,200	1,412,200
Chase	16,800	16,400	14,100	18.0	253,300	746,500
Coffey	32,100	32,100	22,900	21.5	491,600	1,448,800
Douglas	26,600	26,100	25,100	45.1	1,131,500	3,334,600
Franklin	23,100	22,800	21,900	35.4	774,800	2,283,400
Geary	15,000	14,300	10,500	29.4	308,600	909,500
Johnson	14,000	14,000	13,800	46.0	635,300	1,872,200
Linn	29,800	29,600	26,200	21.7	569,300	1,677,700
Lyon	54,000	52,200	47,700	24.4	1,162,700	3,426,500
Miami	25,800	25,500	24,900	36.9	918,300	2,706,300
Morris	41,200	36,200	23,400	22.1	517,200	1,524,200
Osage	55,000	54,400	51,300	37.4	1,918,000	5,652,200
Shawnee	31,200	30,800	29,400	40.0	1,174,700	3,461,900
Wabaunsee	29,000	27,800	24,000	24.7	592,600	1,746,400
District total	417,000	404,000	354,400	30.8	10,927,100	32,202,400
Southeast District:						
Allen	28,300	27,500	26,400	23.5	620,900	1,879,500
Bourbon	26,700	24,500	21,800	18.6	406,200	1,229,600
Butler	88,000	79,500	66,800	23.0	1,536,200	4,650,100
Chautauqua	6,300	4,700	1,800	16.0	28,800	87,200
Cherokee	23,700	21,900	21,900	27.3	596,900	1,806,800
Cowley	30,000	27,800	24,500	30.6	749,700	2,269,300
Crawford	35,900	34,500	27,800	18.0	500,400	1,514,700
Elk	14,800	13,800	8,500	13.1	111,000	336,000
Greenwood	29,200	27,100	15,800	17.7	279,200	845,100
Labette	36,000	34,900	33,400	23.1	771,000	2,333,800
Montgomery	36,700	32,100	26,500	18.8	497,600	1,506,200
Neosho	36,200	31,900	29,400	23.5	690,600	2,090,400
Wilson	33,200	32,200	26,500	17.5	464,600	1,406,300
Woodson	23,000	22,500	20,000	23.0	460,000	1,392,400
District total	448,000	414,900	351,100	22.0	7,713,100	23,347,400
State	4,700,000	4,400,000	3,640,000	43.0	156,520,000	460,169,000

SORGHUM FOR SILAGE, 1979

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
Northwest District:				
Cheyenne	2,500	8.9	22,300	376,900
Decatur	3,000	10.4	31,300	528,900
Graham	2,800	10.6	29,700	501,900
Norton	800	13.6	10,900	184,200
Rawlins	3,100	11.9	36,900	623,600
Sheridan	6,000	15.9	95,300	1,610,400
Sherman	400	13.5	5,400	91,300
Thomas	900	12.3	11,100	187,600
District total	19,500	12.5	242,900	4,104,800
West Central District:				
Gove	12,800	13.4	171,400	2,690,900
Greeley	3,800	10.2	38,800	609,100
Lane	1,200	13.8	16,600	260,600
Logan	800	9.4	7,500	117,700
Ness	2,500	11.8	29,500	463,100
Scott	5,300	12.5	66,300	1,040,900
Trego	6,800	10.9	74,200	1,164,900
Wallace	700	11.7	8,200	128,700
Wichita	5,100	14.8	75,400	1,183,700
District total	39,000	12.5	487,900	7,659,600
Southwest District:				
Clark	3,600	8.9	32,100	532,800
Finney	3,000	14.0	42,000	697,200
Ford	6,700	14.8	99,100	1,644,900
Grant	5,900	16.0	94,200	1,563,600
Gray	5,100	15.1	76,900	1,276,500
Hamilton	4,000	14.5	57,900	961,100
Haskell	900	16.1	14,500	240,700
Hodgeman	2,700	16.8	45,300	751,900
Kearny	800	10.9	8,700	144,400
Meade	2,600	10.0	26,100	433,200
Morton	2,400	16.9	40,500	672,300
Seward	700	16.9	11,800	195,900
Stanton	600	16.8	10,100	167,600
Stevens				
District total	39,000	14.3	559,200	9,282,100
North Central District:				
Clay	6,500	13.0	84,500	1,402,600
Cloud	4,700	14.3	67,200	1,115,500
Jewell	5,700	12.1	69,000	1,145,300
Mitchell	1,400	12.3	17,200	285,500
Osborne	5,100	9.3	47,600	790,100
Ottawa	8,500	10.1	86,000	1,427,500
Phillips	7,400	11.4	84,400	1,401,000
Republic	5,600	10.4	58,300	967,700
Rooks	5,600	11.7	65,600	1,088,900
Smith	15,100	11.4	172,300	2,860,000
Washington	3,400	9.6	32,700	542,800
District total	69,000	11.4	784,800	13,026,900
Central District				
Barton	900	9.2	8,300	130,300
Dickinson	12,300	12.2	150,100	2,356,200
Ellis	4,100	9.7	39,900	626,300
Ellsworth	1,700	8.9	15,200	238,600
Lincoln	4,900	12.1	59,300	930,800
McPherson	3,300	12.9	42,600	668,700
Marion	6,400	11.0	70,500	1,106,600
Rice	2,000	11.4	22,800	357,900
Rush	3,700	11.4	42,200	662,400
Russell	3,100	8.9	27,700	434,800
Saline	1,200	10.6	12,700	199,400
District total	43,600	11.3	491,300	7,712,000

SORGHUM FOR SILAGE, 1979—*Concluded*

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value dollars
South Central District:				
Barber	2,300	10.2	23,500	392,400
Comanche	5,400	11.5	62,200	1,038,600
Edwards	3,500	11.0	38,600	644,600
Harper	1,700	8.9	15,200	253,800
Harvey	3,700	11.9	44,100	736,400
Kingman	2,100	9.0	19,000	317,300
Kiowa	1,900	12.2	23,200	387,400
Pawnee	800	10.0	8,000	133,600
Pratt	400	9.3	3,700	61,800
Reno	14,100	9.9	139,800	2,334,300
Sedgwick	4,200	8.9	37,500	626,200
Stafford	1,506	9.6	14,400	240,500
Sumner	6,200	8.9	55,400	925,100
District total	47,800	10.1	484,600	8,092,000
Northeast District:				
Atchison	1,700	14.9	25,300	430,100
Brown				
Doniphan	200	16.0	3,200	54,400
Jackson	1,600	10.9	17,500	297,500
Jefferson	300	14.0	4,200	71,400
Leavenworth	5,300	10.2	54,200	921,400
Marshall	4,500	13.2	59,400	1,009,800
Nemaha	7,000	12.0	83,900	1,426,100
Pottawatomie	1,300	14.3	18,600	316,200
Riley	4,200	15.9	66,700	1,133,900
Wyandotte				
District total	26,100	12.8	333,000	5,660,800
East Central District:				
Anderson				
Chase	300	14.3	4,300	70,100
Coffey	1,200	9.6	11,500	187,500
Douglas	500	14.8	7,400	120,600
Franklin	1,300	11.5	15,000	244,500
Geary	500	11.0	5,500	89,700
Johnson	400	12.0	4,800	78,200
Linn	500	13.4	6,700	109,200
Lyon	3,300	15.5	51,100	832,900
Miami				
Morris	2,600	12.9	33,500	546,100
Osage	2,200	12.9	28,400	463,000
Shawnee	300	10.7	3,200	52,200
Wabaunsee	1,900	12.7	24,100	392,900
District total	15,000	13.0	195,500	3,186,900
Southeast District:				
Allen	300	12.0	3,600	58,700
Bourbon	1,800	11.4	20,500	334,100
Butler	5,800	13.6	78,900	1,285,900
Chautauqua				
Cherokee				
Cowley	2,000	9.6	19,200	313,000
Crawford				
Elk	4,100	13.2	54,100	881,800
Greenwood	2,100	13.8	29,000	472,700
Labette	600	15.0	9,000	146,700
Montgomery	1,800	12.5	22,500	366,700
Neosho	1,700	8.9	15,200	247,800
Wilson	600	11.0	6,600	107,600
Woodson	200	11.0	2,200	35,900
District total	21,000	12.4	260,800	4,250,900
State	320,000	12.0	3,840,000	62,976,000

SORGHUM FOR SILAGE, 1980

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
Northwest District:				
Cheyenne	500	12.6	6,300	127,900
Decatur	3,900	10.3	40,000	811,800
Graham	2,200	9.1	20,100	408,000
Norton	3,900	11.4	44,500	903,200
Rawlins	2,900	13.7	39,700	805,800
Sheridan	3,300	13.7	45,200	917,400
Sherman	300	9.0	2,700	54,800
Thomas	4,700	13.7	64,200	1,302,900
District total	21,700	12.1	262,700	5,331,800
West Central District:				
Gove	8,600	13.7	117,800	2,151,900
Greeley	1,900	16.1	30,600	559,000
Lane	1,300	10.3	13,400	244,800
Logan	1,000	8.0	8,000	146,100
Ness	1,900	13.8	26,200	478,600
Scott	3,800	9.2	34,900	637,500
Trego	5,500	13.8	76,000	1,388,300
Wallace	600	7.7	4,600	84,000
Wichita	2,800	13.8	38,600	705,100
District total	27,400	12.8	350,100	6,395,300
Southwest District:				
Clark	900	8.1	7,300	133,400
Finney	4,100	16.1	66,100	1,207,500
Ford	2,300	13.8	31,800	580,900
Grant	1,700	15.0	25,500	465,800
Gray	300	16.0	4,800	87,700
Hamilton	5,900	18.2	107,400	1,961,800
Haskell	1,300	18.2	23,700	432,900
Hodgeman	2,500	16.1	40,300	736,200
Kearny	1,300	12.0	15,600	285,000
Meade	500	8.8	4,400	80,400
Morton	300	11.7	3,500	63,900
Seward	500	11.6	5,800	105,900
Stanton	300	9.7	2,900	53,000
Stevens	2,600	11.5	30,000	548,000
District total	24,500	15.1	369,100	6,742,400
North Central District:				
Clay	8,900	4.6	40,600	774,600
Cloud	500	6.8	3,400	64,900
Jewell	3,300	8.0	26,300	501,800
Mitchell	2,900	5.7	16,500	314,800
Osborne	6,900	9.1	62,900	1,200,000
Ottawa	1,900	6.8	13,000	248,000
Phillips	7,100	9.1	64,800	1,236,300
Republic	3,300	8.0	26,300	501,800
Rooks	5,000	8.0	39,900	761,200
Smith	12,200	10.3	125,300	2,390,400
Washington	4,300	8.0	34,300	654,400
District total	56,300	8.1	453,300	8,648,200
Central District:				
Barton	200	12.5	2,500	49,500
Dickinson	12,200	4.6	55,600	1,100,300
Ellis	100	8.0	800	15,800
Ellsworth	400	6.8	2,700	53,400
Lincoln	2,700	6.9	18,500	366,100
McPherson	4,400	6.8	30,100	595,700
Marion	17,200	4.6	78,400	1,551,600
Rice	1,400	10.3	14,400	285,000
Rush	1,400	10.3	14,400	285,000
Russell	2,400	9.1	21,900	433,400
Saline	1,300	5.7	7,400	146,400
District total	43,700	5.6	246,700	4,882,200

SORGHUM FOR SILAGE, 1980—*Concluded*

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
South Central District:				
Barber	2,500	10.3	25,700	511,200
Comanche	3,700	11.4	42,200	839,400
Edwards	4,400	11.4	50,200	998,500
Harper	2,500	6.8	17,100	340,100
Harvey	6,700	6.9	45,900	913,000
Kingman	2,400	6.8	16,400	326,200
Kiowa	500	11.4	5,700	113,400
Pawnee	1,000	12.5	12,500	248,600
Pratt	700	10.3	7,200	143,200
Reno	9,300	10.3	95,400	1,897,700
Sedgwick	2,900	5.7	16,500	328,200
Stafford	4,700	12.6	59,000	1,173,600
Sumner	6,900	6.8	47,200	938,900
District total	48,200	9.1	441,000	8,772,000
Northeast District:				
Atchison	1,300	13.7	17,800	307,100
Brown	2,100	9.1	19,200	331,300
Doniphan	300	13.7	4,100	70,700
Jackson	1,500	13.7	20,500	353,700
Jefferson	300	14.0	4,200	72,500
Leavenworth	3,800	11.4	43,300	747,100
Marshall	3,700	9.1	33,800	583,200
Nemaha	8,700	6.8	59,500	1,026,400
Pottawatomie	1,300	6.8	8,900	153,600
Riley	3,700	8.0	29,500	509,000
Wyandotte				
District total	26,700	9.0	240,800	4,154,600
East Central District:				
Anderson	100	5.0	500	8,600
Chase	1,300	8.0	10,400	179,400
Coffey	5,700	5.7	32,600	562,400
Douglas	1,000	8.0	8,000	138,000
Franklin	900	8.0	7,200	124,200
Geary	1,200	8.0	9,600	165,600
Johnson	200	4.5	900	15,500
Linn	500	6.8	3,400	58,700
Lyon	2,300	5.7	13,100	226,000
Miami	300	9.0	2,700	46,600
Morris	7,700	8.0	61,800	1,066,200
Osage	3,100	10.0	31,000	534,800
Shawnee	700	9.1	6,400	110,400
Wabaunsee	2,000	5.7	11,400	196,700
District total	27,000	7.4	199,000	3,433,100
Southeast District:				
Allen	100	10.0	1,000	22,300
Bourbon	1,700	6.9	11,700	261,200
Butler	9,400	5.7	53,700	1,198,900
Chautauqua	500	5.8	2,900	64,800
Cherokee				
Cowley	1,900	6.8	13,000	290,300
Crawford	1,700	5.7	9,700	216,600
Elk	1,600	5.7	9,100	203,200
Greenwood	7,200	5.7	41,100	917,700
Labette	1,500	8.0	12,000	267,900
Montgomery	800	6.9	5,500	122,800
Neosho	1,400	9.8	13,700	305,900
Wilson	1,200	5.0	6,000	134,000
Woodson	500	5.8	2,900	64,800
District total	29,500	6.2	182,300	4,070,400
State	305,000	9.0	2,745,000	52,430,000

SORGHUM FOR FORAGE, 1979

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
Northwest District:				
Cheyenne	4,600	3.0	14,000	397,000
Decatur	9,000	2.8	24,800	703,300
Graham	20,300	3.3	67,900	1,925,600
Norton	16,100	4.2	68,200	1,934,200
Rawlins	11,300	3.0	33,400	947,200
Sheridan	12,200	4.2	51,600	1,463,400
Sherman	1,900	3.5	6,700	190,000
Thomas	4,800	3.0	14,600	414,100
District total	80,200	3.5	281,200	7,974,800
West Central District:				
Gove	10,600	4.4	46,900	1,462,400
Greeley	1,500	2.0	3,000	93,500
Lane	3,200	2.9	9,400	293,100
Logan	3,800	3.1	11,600	361,700
Ness	12,200	3.4	42,000	1,309,700
Scott	2,600	4.2	11,000	343,000
Trego	16,200	3.2	51,100	1,593,500
Wallace	1,900	2.9	5,600	174,600
Wichita	300	3.3	1,000	31,200
District total	52,300	3.5	181,600	5,662,700
Southwest District:				
Clark	4,800	2.2	10,400	344,300
Finney	2,300	3.5	8,100	268,100
Ford	12,400	3.3	40,400	1,337,400
Grant	3,800	2.4	9,300	307,900
Gray	1,500	3.7	5,600	185,400
Hamilton	2,800	3.0	8,500	281,400
Haskell	1,500	2.0	3,000	99,300
Hodgeman	3,400	3.9	13,400	443,600
Kearny	2,400	2.2	5,200	172,100
Meade	6,100	2.8	16,800	556,200
Morton	4,000	3.2	12,600	417,100
Seward	1,100	3.9	4,300	142,400
Stanton	1,800	1.9	3,500	115,900
Stevens	6,200	2.2	13,400	443,600
District total	54,100	2.9	154,500	5,114,700
North Central District:				
Clay	1,200	3.9	4,700	120,000
Cloud	4,300	4.9	21,200	541,300
Jewell	3,700	4.9	18,200	464,700
Mitchell	1,800	3.4	6,200	158,300
Osborne	14,300	3.8	54,800	1,399,200
Ottawa	1,500	3.9	5,800	148,100
Phillips	12,000	3.2	37,800	965,100
Republic	3,000	3.0	8,900	227,200
Rooks	10,600	3.7	39,600	1,011,100
Smith	11,000	3.8	42,200	1,077,500
Washington	3,800	3.7	14,200	362,600
District total	67,200	3.8	253,600	6,475,100
Central District:				
Barton	3,700	3.9	14,600	416,900
Dickinson	2,900	4.6	13,400	382,700
Ellis	9,700	3.2	31,500	899,600
Ellsworth	4,100	3.0	12,500	357,000
Lincoln	2,900	4.5	13,100	374,100
McPherson	1,500	4.9	7,400	211,300
Marion	1,600	3.6	5,700	162,800
Rice	2,100	3.5	7,400	211,300
Rush	7,100	3.0	21,000	599,700
Russell	13,700	3.2	43,200	1,233,800
Saline	1,100	5.3	5,800	165,600
District total	50,400	3.5	175,600	5,014,800

SORGHUM FOR FORAGE, 1979—*Concluded*

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
South Central District:				
Barber	10,500	2.3	23,800	775,800
Comanche	10,500	3.0	31,000	1,010,500
Edwards	500	2.2	1,100	35,900
Harper	6,400	3.3	21,400	697,600
Harvey	1,900	4.7	9,000	293,400
Kingman	9,500	2.6	24,300	792,100
Kiowa	8,900	3.5	31,500	1,026,800
Pawnee	5,200	2.8	14,300	466,200
Pratt	5,000	2.0	9,800	319,500
Reno	3,600	3.8	13,800	449,900
Sedgwick	3,500	2.0	6,900	224,900
Stafford	2,500	4.8	12,100	394,400
Sumner	2,300	2.5	5,700	185,800
District total	70,300	2.9	204,700	6,872,800
Northeast District:				
Atchison	500	6.8	3,400	78,900
Brown	500	6.8	3,400	78,900
Doniphan				
Jackson	1,100	6.6	7,300	169,400
Jefferson	100	5.0	500	11,600
Leavenworth	2,300	3.6	8,200	190,300
Marshall	2,400	6.9	16,600	385,100
Nemaha	500	6.6	3,300	76,600
Pottawatomie	500	6.8	3,400	78,900
Riley	100	7.0	700	16,200
Wyandotte				
District total	8,000	5.9	46,800	1,085,900
East Central District:				
Anderson				
Chase	300	6.7	2,000	46,400
Coffey	1,100	3.4	3,700	85,800
Douglas	100	4.0	400	9,300
Franklin				
Geary	200	4.0	800	18,600
Johnson	200	4.0	800	18,600
Linn	1,100	4.9	5,400	125,200
Lyon	1,200	4.3	5,100	118,300
Miami	100	4.0	400	9,300
Morris	500	3.0	1,500	34,800
Osage	600	6.8	4,100	95,100
Shawnee	500	4.0	2,000	46,400
Wabaunsee	100	6.0	600	13,900
District total	6,000	4.5	26,800	621,700
Southeast District:				
Allen	300	2.7	800	18,600
Bourbon				
Butler	2,200	3.2	7,100	164,900
Chautauqua				
Cherokee				
Cowley	1,800	2.4	4,400	102,200
Crawford	500	3.4	1,700	39,500
Elk	300	3.0	900	20,900
Greenwood	1,100	2.7	3,000	69,700
Labette	2,100	4.6	9,600	222,900
Montgomery	2,300	2.6	5,900	137,000
Neosho	400	2.0	800	18,600
Wilson	500	2.0	1,000	23,200
Woodson				
District total	11,500	3.1	35,200	817,500
State	400,000	3.4	1,360,000	39,440,000

SORGHUM FOR FORAGE, 1980

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
Northwest District:				
Cheyenne	4,700	2.8	13,300	489,900
Decatur	6,600	3.8	24,900	917,200
Graham	11,700	1.9	22,100	814,100
Norton	7,800	2.8	22,100	814,100
Rawlins	6,000	2.8	17,000	626,200
Sheridan	12,600	3.8	47,700	1,757,100
Sherman	3,600	2.8	10,200	375,700
Thomas	4,700	2.8	13,300	489,900
District total	57,700	3.0	170,600	6,284,200
West Central District:				
Gove	13,700	3.8	51,800	1,799,300
Greeley	2,600	1.9	4,900	170,200
Lane	3,400	2.8	9,600	333,400
Logan	2,600	2.8	7,400	257,000
Ness	4,000	1.9	7,600	264,000
Scott	1,100	2.8	3,100	107,700
Trego	14,200	2.8	40,200	1,396,300
Wallace	3,800	1.9	7,200	250,100
Wichita	500	2.8	1,400	48,600
District total	45,900	2.9	133,200	4,626,600
Southwest District:				
Clark	7,100	2.8	20,000	736,800
Finney	4,900	1.9	9,300	342,600
Ford	5,500	2.8	15,600	574,700
Grant	2,700	1.9	5,100	187,900
Gray	2,200	2.8	6,200	228,400
Hamilton	5,500	1.9	10,400	383,200
Haskell	800	1.9	1,500	55,300
Hodgeman	2,100	1.9	4,000	147,400
Kearny	3,100	2.8	8,800	324,200
Meade	4,600	1.9	8,700	320,500
Morton	6,100	1.9	11,500	423,700
Seward	2,200	1.9	4,200	154,700
Stanton	700	1.9	1,300	47,900
Stevens	1,000	1.9	1,900	70,000
District total	48,500	2.2	108,500	3,997,300
North Central District:				
Clay	4,300	1.9	8,100	264,300
Cloud	6,800	1.9	12,800	417,600
Jewell	7,500	3.2	24,300	792,800
Mitchell	10,300	3.3	34,200	1,115,800
Osborne	8,800	3.0	26,400	861,300
Ottawa	1,000	3.0	3,000	97,900
Phillips	12,100	2.8	34,200	1,115,800
Republic	5,000	1.9	9,400	306,700
Rooks	16,800	3.3	54,700	1,784,300
Smith	11,200	3.8	42,400	1,383,300
Washington	7,000	2.8	19,800	646,000
District total	90,800	3.0	269,300	8,785,800
Central District:				
Barton	3,800	2.8	10,800	397,800
Dickinson	4,000	1.9	7,600	280,000
Ellis	9,300	2.8	26,400	972,500
Ellsworth	6,900	1.9	13,000	478,900
Lincoln	4,200	1.9	7,900	291,000
McPherson	3,000	1.9	5,700	210,000
Marion	10,800	1.9	20,400	751,500
Rice	3,100	2.8	8,800	324,200
Rush	5,600	3.8	21,200	780,900
Russell	12,600	2.8	35,600	1,311,200
Saline	2,000	1.9	3,800	140,000
District total	65,300	2.5	161,200	5,938,000

SORGHUM FOR FORAGE, 1980—*Concluded*

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
South Central District:				
Barber	18,500	2.8	52,400	2,095,700
Comanche	13,600	1.9	25,700	1,027,900
Edwards	1,400	2.9	4,000	160,000
Harper	2,600	1.9	4,900	196,000
Harvey	3,700	2.8	10,500	419,900
Kingman	12,400	2.8	35,100	1,403,800
Kiowa	6,200	2.8	17,600	703,900
Pawnee	3,600	2.8	10,200	408,000
Pratt	3,400	1.9	6,400	256,000
Reno	1,500	1.9	2,800	112,000
Sedgwick	7,400	1.9	14,000	559,900
Stafford	2,000	3.8	7,600	304,000
Sumner	6,100	1.9	11,500	459,900
District total	82,400	2.5	202,700	8,107,000
Northeast District:				
Atchison	400	2.8	1,100	25,500
Brown	500	4.8	2,400	55,600
Doniphan				
Jackson	300	2.0	600	13,900
Jefferson	400	2.0	800	18,500
Leavenworth	100	2.0	200	4,600
Marshall	2,700	3.7	10,100	234,000
Nemaha	800	1.9	1,500	34,700
Pottawatomie	200	4.0	800	18,500
Riley	2,100	2.8	5,900	136,700
Wyandotte				
District total	7,500	3.1	23,400	542,000
East Central District:				
Anderson	2,500	1.9	4,700	123,700
Chase	1,000	1.9	1,900	50,000
Coffey	3,500	1.9	6,600	173,600
Douglas				
Franklin				
Geary	2,600	1.9	4,900	128,900
Johnson				
Linn	2,900	1.9	5,500	144,700
Lyon	2,200	1.9	4,200	110,500
Miami	300	2.0	600	15,800
Morris	5,100	1.9	9,600	252,600
Osage				
Shawnee	700	4.7	3,300	86,800
Wabaunsee	1,800	2.8	5,100	134,200
District total	22,600	2.1	46,400	1,220,800
Southeast District:				
Allen	1,000	2.8	2,800	103,200
Bourbon	1,000	2.8	2,800	103,200
Butler	3,300	1.9	6,200	228,400
Chautauqua	2,400	1.9	4,500	165,800
Cherokee				
Cowley	1,400	1.9	2,600	95,800
Crawford	5,000	1.9	9,600	353,600
Elk	3,700	1.9	7,000	257,900
Greenwood	4,100	1.9	7,700	283,700
Labette				
Montgomery	4,800	1.9	9,100	335,300
Neosho	1,100	2.8	3,100	114,200
Wilson	4,500	1.9	8,500	313,200
Woodson	2,000	1.9	3,800	140,000
District total	34,300	2.0	67,700	2,494,300
State	455,000	2.6	1,183,000	41,996,000

SORGHUM FOR GRAIN—IRRIGATED AND DRYLAND, 1979

County	Irrigated			Dryland		
	Acres harvested	Yield per acre, bushels	Production, bushels	Acres harvested	Yield per acre, bushels	Production, bushels
Northwest District:						
Cheyenne	1,100	95.3	104,800	4,700	41.7	196,200
Decatur	1,400	108.3	151,600	22,600	56.2	1,270,600
Graham	2,200	96.5	212,200	7,900	54.2	428,500
Norton	2,300	108.3	249,100	17,300	59.0	1,020,700
Rawlins	4,000	106.6	426,400	11,500	45.6	524,500
Sheridan	9,700	99.2	962,500	5,800	53.1	307,700
Sherman	7,500	88.6	664,500	1,700	50.9	86,600
Thomas	12,400	93.0	1,153,600	10,900	52.6	572,800
District total	40,600	96.7	3,924,700	82,400	53.5	4,407,600
West Central District:						
Gove	4,100	98.4	403,300	40,500	46.1	1,866,000
Greeley	3,100	77.1	239,100	1,400	32.3	45,200
Lane	9,400	82.8	778,700	38,000	50.4	1,914,000
Logan	900	90.1	81,100	10,600	45.8	485,300
Ness	3,400	86.9	295,600	30,300	45.3	1,372,400
Scott	21,600	94.2	2,034,100	12,100	48.9	591,700
Trego	1,600	110.2	176,300	25,200	51.9	1,308,700
Wallace	2,900	89.6	259,700	200	37.0	7,400
Wichita	18,000	85.8	1,543,600	1,700	31.8	54,100
District total	65,000	89.4	5,811,500	160,000	47.8	7,644,800
Southwest District:						
Clark	700	111.9	78,300	2,800	33.3	93,100
Finney	52,200	91.6	4,783,300	12,800	47.7	610,900
Ford	15,800	108.9	1,721,400	5,000	44.9	224,700
Grant	36,000	81.0	2,917,600	41,000	32.1	1,314,200
Gray	21,200	103.1	2,186,000	12,400	45.4	563,400
Hamilton	8,000	74.0	592,200	4,900	25.8	126,200
Haskell	24,900	92.9	2,313,700	16,000	34.1	544,800
Hodgeman	7,100	89.1	632,300	5,100	45.4	231,700
Kearny	9,700	77.7	753,500	12,000	35.9	430,200
Meade	40,200	93.1	3,743,300	600	25.3	15,200
Morton	31,000	94.5	2,929,600	74,000	42.7	3,162,500
Seward	32,600	92.5	3,016,300	32,400	37.1	1,203,500
Stanton	36,900	73.9	2,727,700	13,000	22.1	286,900
Stevens	36,700	88.2	3,235,800	139,000	40.6	5,648,900
District total	353,000	89.6	31,631,000	371,000	39.0	14,456,200
North Central District:						
Clay	1,100	108.8	119,700	46,600	64.4	3,003,200
Cloud	4,000	97.1	388,200	35,900	69.9	2,508,900
Jewell	1,200	100.0	120,000	75,800	71.5	5,419,400
Mitchell	1,000	102.9	102,900	39,600	63.4	2,512,200
Osborne	5,500	114.1	627,700	15,500	64.0	992,700
Ottawa	1,000	98.8	98,800	19,000	55.8	1,060,000
Phillips	900	104.9	94,400	26,700	61.3	1,637,400
Republic	3,700	99.8	369,300	70,300	72.6	5,104,100
Rooks	500	110.8	55,400	18,400	57.5	1,058,000
Smith	3,400	98.3	334,300	37,900	70.5	2,671,500
Washington	1,000	110.8	110,800	99,000	78.5	7,776,000
District total	23,300	103.9	2,421,500	484,700	69.6	33,743,400
Central District:						
Barton	11,800	111.1	1,310,900	26,100	39.3	1,025,700
Dickinson	600	100.7	60,400	56,400	58.6	3,302,300
Ellis	2,300	76.0	174,700	11,600	50.6	587,100
Ellsworth	1,400	100.7	141,000	16,400	43.1	706,300
Lincoln	1,200	77.7	93,200	18,500	59.6	1,103,400
McPherson	11,000	108.3	1,191,000	61,000	60.0	3,662,400
Marion	300	94.0	28,200	78,900	61.0	4,815,300
Rice	4,600	111.4	512,400	55,400	55.9	3,095,300
Rush	7,000	103.2	722,600	7,200	46.0	331,500
Russell	600	76.2	45,700	12,100	47.6	576,400
Saline	2,400	89.1	213,900	23,200	55.9	1,296,200
District total	43,200	104.0	4,494,000	366,800	55.9	20,501,900

SORGHUM FOR GRAIN—IRRIGATED AND DRYLAND, 1979—*Concluded*

County	Irrigated			Dryland		
	Acres harvested	Yield per acre, bushels	Production, bushels	Acres harvested	Yield per acre, bushels	Production, bushels
South Central District:						
Barber	1,000	100.8	100,800	1,500	33.5	50,300
Comanche	1,300	106.5	138,400	8,000	29.3	234,700
Edwards	16,300	96.1	1,566,800	12,500	42.2	527,700
Harper	600	72.2	43,300	2,300	44.6	102,600
Harvey	3,000	109.0	327,100	60,000	50.3	3,017,900
Kingman	5,500	84.3	463,800	11,000	31.0	341,400
Kiowa	8,100	74.2	601,000	11,200	46.4	519,800
Pawnee	11,800	100.4	1,184,600	20,300	47.9	972,400
Pratt	9,000	102.6	923,200	22,000	47.9	1,053,900
Reno	12,000	103.5	1,241,600	66,800	60.6	4,046,700
Sedgwick	2,300	83.5	192,100	68,700	46.0	3,160,700
Stafford	16,600	113.7	1,887,100	27,200	62.6	1,702,000
Sumner	2,000	97.8	195,600	18,000	37.4	673,600
District total	89,500	99.1	8,865,400	329,500	49.8	16,403,700
Northeast District:						
Atchison	300	107.7	32,300	36,200	85.3	3,086,800
Brown	......	......	......	43,600	89.8	3,914,100
Doniphan	......	......	......	10,900	97.1	1,058,200
Jackson	100	104.0	10,400	35,000	76.4	2,672,700
Jefferson	......	......	......	27,900	87.5	2,440,500
Leavenworth	......	......	......	16,100	73.5	1,182,700
Marshall	1,000	109.0	109,000	104,200	80.1	8,342,700
Nemaha	100	109.0	10,900	84,900	80.5	6,831,500
Pottawatomie	500	105.4	52,700	39,800	89.8	3,573,000
Riley	500	109.0	54,500	31,300	83.3	2,606,300
Wyandotte	......	......	......	1,600	76.9	123,100
District total	2,500	107.9	269,800	431,500	83.0	35,831,600
East Central District:						
Anderson	100	105.0	10,500	21,500	81.2	1,745,800
Chase	500	106.4	53,200	11,100	74.6	828,500
Coffey	......	......	......	26,600	77.9	2,071,300
Douglas	100	92.0	9,200	23,300	87.9	2,047,000
Franklin	300	108.7	32,600	19,100	82.4	1,574,000
Geary	......	......	......	12,100	76.8	928,800
Johnson	100	106.0	10,600	11,900	98.8	1,176,300
Linn	100	106.0	10,600	21,100	72.1	1,521,700
Lyon	200	93.0	18,600	47,700	77.7	3,704,800
Miami	100	109.0	10,900	24,100	86.0	2,073,600
Morris	300	122.7	36,800	37,300	73.9	2,757,800
Osage	......	......	......	48,400	85.6	4,144,900
Shawnee	2,700	107.4	290,000	26,100	79.6	2,077,200
Wabaunsee	2,200	106.4	234,000	25,000	75.7	1,891,300
District Total	6,700	107.0	717,000	355,300	80.3	28,543,000
Southeast District:						
Allen	100	99.0	9,900	23,500	79.0	1,856,800
Bourbon	300	96.0	28,800	18,500	65.3	1,207,300
Butler	600	86.3	51,800	83,400	70.3	5,861,100
Chautauqua	......	......	......	5,400	73.3	395,800
Cherokee	200	86.0	17,200	17,700	80.2	1,419,800
Cowley	600	96.2	57,700	26,600	55.8	1,484,800
Crawford	600	107.5	64,500	31,400	80.4	2,525,100
Elk	200	91.0	18,200	8,700	61.7	537,200
Greenwood	800	86.3	69,000	17,900	68.8	1,231,000
Labette	400	97.0	38,800	25,700	73.2	1,881,000
Montgomery	400	101.3	40,500	28,200	69.4	1,956,300
Neosho	800	110.5	88,400	23,700	77.1	1,827,400
Wilson	1,200	101.1	121,300	28,000	81.3	2,277,000
Woodson	......	......	......	20,100	79.4	1,596,200
District Total	6,200	97.8	606,100	358,800	72.6	26,056,800
State	630,000	93.2	58,741,000	2,940,000	63.8	187,589,000

SORGHUM FOR GRAIN—IRRIGATED AND DRYLAND, 1980

County	Irrigated			Non-Irrigated		
	Acres harvested	Yield per acre, bushels	Production, bushels	Acres harvested	Yield per acre, bushels	Production, bushels
Northwest District:						
Cheyenne	4,000	82.0	328,000	2,800	51.5	144,200
Decatur	500	85.0	42,500	22,900	36.9	845,000
Graham	1,200	70.0	84,000	11,500	29.0	333,500
Norton	3,000	72.5	217,400	21,700	32.6	707,400
Rawlins	4,400	92.6	407,600	9,600	49.0	470,400
Sheridan	10,000	81.0	810,000	5,100	38.6	196,900
Sherman	9,400	83.0	780,200	1,000	40.0	40,000
Thomas	8,100	76.0	615,300	11,000	43.7	481,200
District total	40,600	80.9	3,285,000	85,600	37.6	3,218,600
West Central District:						
Gove	5,300	77.1	408,800	16,600	46.0	763,600
Greeley	2,900	75.0	217,500	9,300	36.0	334,800
Lane	7,400	72.0	532,700	17,200	44.8	769,700
Logan	900	80.0	72,000	6,100	39.1	238,600
Ness	3,900	76.7	299,200	14,100	42.0	592,900
Scott	21,800	70.0	1,527,000	7,300	44.0	321,200
Trego	1,200	80.0	96,000	15,800	42.1	665,600
Wallace	6,600	93.5	617,100	2,100	40.0	84,000
Wichita	19,300	88.5	1,707,700	5,000	52.7	263,300
District total	69,300	79.0	5,478,000	93,500	43.1	4,033,700
Southwest District:						
Clark	800	75.0	60,000	3,900	35.2	137,300
Finney	42,400	90.1	3,822,200	24,900	37.9	944,600
Ford	28,900	93.0	2,687,700	14,300	40.0	572,000
Grant	37,700	75.0	2,827,500	34,500	37.1	1,278,800
Gray	31,900	84.8	2,706,400	11,400	34.9	397,900
Hamilton	8,100	91.0	736,800	6,900	23.0	158,700
Haskell	36,300	95.3	3,459,100	11,500	30.4	349,600
Hodgeman	6,400	91.5	585,300	9,100	41.0	373,100
Kearny	18,300	74.5	1,363,900	1,300	41.0	53,300
Meade	55,200	97.1	5,360,300	8,300	31.0	256,900
Morton	26,900	79.1	2,129,000	73,800	24.2	1,788,900
Seward	38,600	81.5	3,145,900	53,100	38.1	2,025,200
Stanton	29,300	84.0	2,461,200	13,300	27.6	367,600
Stevens	49,200	81.0	3,985,200	157,500	33.6	5,292,600
District total	410,000	86.2	35,330,500	423,800	33.0	13,996,500
North Central District:						
Clay	1,600	54.0	86,400	27,800	22.4	623,800
Cloud	2,700	63.0	170,100	18,000	17.9	321,400
Jewell	1,100	80.9	89,000	59,300	42.9	2,543,300
Mitchell	500	85.0	42,500	26,300	23.3	612,800
Osborne	2,600	96.0	249,600	18,000	36.9	664,500
Ottawa	1,300	55.0	71,500	4,400	12.5	54,900
Phillips	300	64.3	19,300	28,800	39.5	1,136,600
Republic	3,300	68.0	224,400	72,600	27.2	1,971,900
Rooks	500	69.8	34,900	22,800	26.4	602,400
Smith	4,400	100.0	440,000	56,200	54.3	3,049,300
Washington	1,800	87.3	157,100	93,900	25.0	2,349,800
District total	20,100	78.8	1,584,800	428,100	32.5	13,930,700
Central District:						
Barton	11,000	104.4	1,148,000	31,900	44.6	1,421,400
Dickinson	1,200	45.9	55,100	38,700	18.6	720,800
Ellis	900	85.0	76,500	14,400	40.3	580,300
Ellsworth	1,000	72.4	72,400	18,900	27.0	510,000
Lincoln	700	65.0	45,500	15,400	24.4	376,200
McPherson	15,000	76.0	1,140,000	47,900	25.5	1,219,400
Marion	200	42.0	8,400	74,000	16.5	1,221,000
Rice	3,000	85.0	255,000	62,800	44.5	2,794,600
Rush	5,500	78.2	430,000	10,400	45.0	468,000
Russell	700	70.3	49,200	18,400	33.4	614,400
Saline	2,700	56.5	152,600	4,600	11.2	51,700
District total	41,900	81.9	3,432,700	337,400	29.6	9,977,800

SORGHUM FOR GRAIN—IRRIGATED AND DRYLAND, 1980—*Concluded*

County	Irrigated			Non-Irrigated		
	Acres harvested	Yield per acre, bushels	Production, bushels	Acres harvested	Yield per acre, bushels	Production, bushels
South Central District:						
Barber	700	90.9	63,600	1,300	28.5	37,100
Comanche	2,000	81.9	163,700	6,200	28.7	177,800
Edwards	19,000	83.0	1,577,000	20,300	40.0	812,000
Harper	1,300	62.5	81,300	6,600	35.0	231,000
Harvey	5,900	73.2	431,900	67,900	22.7	1,543,800
Kingman	3,900	91.2	355,700	10,700	32.5	347,400
Kiowa	16,800	66.0	1,108,000	15,700	34.7	544,200
Pawnee	17,700	96.5	1,708,600	24,300	41.5	1,008,700
Pratt	13,500	69.2	934,100	36,400	38.5	1,401,400
Reno	18,400	81.6	1,501,700	76,700	47.2	3,620,200
Sedgwick	3,600	92.8	333,900	76,700	32.5	2,490,700
Stafford	25,500	94.0	2,397,000	32,400	35.8	1,158,700
Sumner	1,200	60.0	72,000	18,200	26.0	473,200
District total	129,500	82.8	10,728,500	393,400	35.2	13,846,200
Northeast District:						
Atchison	400	75.0	30,000	37,000	60.6	2,241,800
Brown				42,900	55.0	2,359,100
Doniphan	200	85.0	17,000	10,000	81.5	814,900
Jackson	100	82.0	8,200	32,400	33.7	1,093,200
Jefferson	200	82.0	16,400	20,500	50.6	1,037,700
Leavenworth				17,900	57.9	1,035,700
Marshall	1,200	85.0	102,000	115,400	27.7	3,197,100
Nemaha	200	82.0	16,400	96,400	41.2	3,975,900
Pottawatomie	700	87.0	60,900	50,800	42.1	2,136,600
Riley	300	70.0	21,000	33,400	24.5	819,200
Wyandotte				1,300	41.3	53,700
District Total	3,300	82.4	271,900	458,000	41.0	18,764,900
East Central District:						
Anderson	100	55.0	5,500	19,100	24.8	473,700
Chase	200	65.0	13,000	13,900	17.3	240,300
Coffey	100	65.0	6,500	22,800	21.3	485,100
Douglas	100	65.0	6,500	25,000	45.0	1,125,000
Franklin	300	75.0	22,500	21,600	34.8	752,300
Geary	100	70.0	7,000	10,400	29.0	301,600
Johnson	100	65.0	6,500	13,700	45.9	628,800
Linn	100	65.0	6,500	26,100	21.6	562,800
Lyon	200	65.0	13,000	47,500	24.2	1,149,700
Miami	100	65.0	6,500	24,800	36.8	911,800
Morris	300	65.0	19,500	23,100	21.5	497,700
Osage	200	65.0	13,000	51,100	37.3	1,905,000
Shawnee	2,500	61.0	152,500	26,900	38.0	1,022,200
Wabaunsee	1,700	60.0	102,000	22,300	22.0	490,600
District Total	6,100	62.4	380,500	348,300	30.3	10,546,600
Southeast District:						
Allen	100	55.0	5,500	26,300	23.4	615,400
Bourbon	300	64.0	19,200	21,500	18.0	387,000
Butler	800	64.0	51,200	66,000	22.5	1,485,000
Chatauqua				1,800	16.0	28,800
Cherokee	200	55.0	11,000	21,700	27.0	585,900
Cowley	800	78.0	62,400	23,700	29.0	687,300
Crawford				27,800	18.0	500,400
Elk	200	64.0	12,800	8,300	11.8	98,200
Greenwood	700	64.0	44,800	15,100	15.5	234,400
Labette	300	64.0	19,200	33,100	22.7	751,800
Montgomery	300	65.0	19,500	26,200	18.2	478,100
Neosho	700	60.0	42,000	28,700	22.6	648,600
Wilson	800	85.0	68,000	25,700	15.4	396,600
Woodson				20,000	23.0	460,000
District Total	5,200	68.4	355,600	345,900	21.3	7,357,500
State	726,000	83.8	60,847,500	2,914,000	32.8	95,672,500

CORN, 1979

County	All Corn		Corn for Grain			
	Acres planted	Acres harvested	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
Northwest District:						
Cheyenne	26,400	26,000	23,800	119.5	2,844,600	6,935,900
Decatur	10,100	10,000	9,400	118.0	1,109,500	2,705,300
Graham	8,700	8,600	6,000	120.3	721,700	1,759,700
Norton	5,400	5,300	4,900	130.2	637,900	1,555,400
Rawlins	9,200	9,100	8,700	125.1	1,088,500	2,654,100
Sheridan	49,200	48,400	37,100	125.4	4,650,800	11,339,900
Sherman	64,000	62,800	59,100	121.8	7,196,400	17,546,800
Thomas	62,000	61,000	58,800	126.9	7,460,600	18,190,900
District total	235,000	231,200	207,800	123.7	25,710,000	62,688,000
West Central District:						
Gove	8,300	8,200	5,400	124.4	672,000	1,692,500
Greeley	20,300	20,000	18,000	114.0	2,052,100	5,168,400
Lane	10,400	10,300	9,000	113.4	1,020,300	2,569,700
Logan	11,200	11,100	8,300	110.0	912,600	2,298,400
Ness	700	700	500	105.0	52,500	132,200
Scott	35,000	34,400	30,700	130.4	4,004,700	10,086,100
Trego	1,600	1,500	1,300	103.5	134,600	339,000
Wallace	47,000	46,300	42,700	114.9	4,905,300	12,354,400
Wichita	46,500	45,700	38,400	115.7	4,443,900	11,192,300
District total	181,000	178,200	154,300	117.9	18,198,000	45,833,000
Southwest District:						
Clark						
Finney	95,000	93,600	74,100	133.1	9,865,000	25,736,300
Ford	30,900	30,500	29,400	131.5	3,865,900	10,085,600
Grant	31,400	30,900	29,100	138.6	4,032,900	10,521,300
Gray	86,000	84,400	81,800	134.9	11,034,200	28,786,600
Hamilton	6,400	6,300	5,400	120.4	650,000	1,695,800
Haskell	97,000	95,400	84,600	136.8	11,572,000	30,189,600
Hodgeman	7,000	6,900	3,300	129.7	428,000	1,116,600
Kearny	34,900	34,300	27,500	140.5	3,862,900	10,077,800
Meade	26,300	25,900	21,900	129.3	2,832,000	7,388,300
Morton	10,200	9,900	9,000	124.5	1,120,100	2,922,200
Seward	14,100	13,500	11,300	128.0	1,446,000	3,772,400
Stanton	39,600	39,000	37,800	137.2	5,188,000	13,534,800
Stevens	20,200	19,900	19,100	129.5	2,473,000	6,451,700
District total	499,000	490,500	434,300	134.4	58,370,000	152,279,000
North Central District:						
Clay	11,300	11,100	9,600	123.6	1,186,400	2,892,800
Cloud	9,400	9,300	8,200	102.7	842,400	2,054,000
Jewell	8,300	8,200	6,100	132.7	809,600	1,974,000
Mitchell	2,300	2,300	1,800	94.8	170,700	416,200
Osborne	4,100	4,000	3,000	122.5	367,600	896,300
Ottawa	1,500	1,500	1,000	105.1	105,100	256,300
Phillips	4,500	4,400	3,700	128.2	474,400	1,156,700
Republic	38,500	37,900	33,000	118.3	3,903,600	9,517,900
Rooks	1,200	1,200	800	123.4	98,700	240,700
Smith	4,600	4,500	3,400	131.2	446,100	1,087,700
Washington	15,300	15,000	11,400	108.2	1,233,400	3,007,400
District total	101,000	99,400	82,000	117.5	9,638,000	23,500,000
Central District:						
Barton	15,800	15,200	12,800	132.7	1,699,000	4,296,200
Dickinson	11,100	11,000	3,000	90.2	270,600	684,300
Ellis	1,200	1,100	600	103.3	62,000	156,800
Ellsworth	400	400	300	113.0	33,900	85,700
Lincoln	1,000	1,000	300	92.7	27,800	70,300
McPherson	12,900	12,700	8,000	122.2	977,200	2,471,000
Marion	8,900	8,800	3,100	82.9	257,000	649,900
Rice	10,500	10,300	7,200	129.7	933,800	2,361,300
Rush	2,300	2,300	1,700	109.4	185,900	470,100
Russell	1,000	1,000	1,000	82.2	82,200	207,900
Saline	3,900	3,900	2,200	87.1	191,600	484,500
District total	69,000	67,700	40,200	117.4	4,721,000	11,938,000

CORN, 1979—*Concluded*

County	All Corn		Corn for Grain			
	Acres planted	Acres harvested	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
South Central District:						
Barber	1,000	1,000	400	130.0	52,000	133,100
Comanche						
Edwards	23,400	23,000	17,000	134.0	2,278,400	5,829,600
Harper	100	100	100	62.0	6,200	15,900
Harvey	10,400	10,200	8,700	122.1	1,062,400	2,718,400
Kingman	1,800	1,800	1,500	120.0	180,000	460,600
Kiowa	8,800	8,700	7,700	130.6	1,005,800	2,573,500
Pawnee	9,100	9,000	8,100	131.3	1,063,200	2,720,400
Pratt	22,000	21,600	13,900	133.5	1,856,100	4,749,200
Reno	7,500	7,400	3,500	121.4	424,900	1,087,200
Sedgwick	16,600	16,300	15,300	117.2	1,792,700	4,587,000
Stafford	19,200	18,900	15,400	134.1	2,064,700	5,283,000
Sumner	2,100	2,100	1,100	102.0	112,200	287,100
District total	122,000	120,100	92,700	128.4	11,898,600	30,445,000
Northeast District:						
Atchison	23,100	22,700	19,100	92.7	1,771,400	4,248,000
Brown	70,000	68,800	66,100	98.0	6,474,700	15,526,800
Doniphan	60,000	59,000	57,600	103.3	5,952,100	14,273,600
Jackson	15,000	14,700	14,400	83.9	1,208,300	2,897,600
Jefferson	30,200	29,700	27,300	92.2	2,517,500	6,037,200
Leavenworth	20,300	19,900	17,400	93.4	1,625,700	3,898,600
Marshall	13,100	12,900	10,800	75.6	816,400	1,957,800
Nemaha	20,900	20,500	16,300	83.5	1,361,400	3,264,700
Pottawatomie	19,400	19,100	17,800	102.4	1,822,600	4,370,700
Riley	7,000	6,900	5,400	101.4	547,800	1,313,700
Wyandotte	3,000	2,900	2,800	94.5	264,500	634,300
District total	282,000	277,100	255,000	95.5	24,362,400	58,423,000
East Central District:						
Anderson	18,000	17,600	16,000	93.0	1,488,700	3,585,100
Chase	4,500	4,400	2,400	92.0	220,900	532,000
Coffey	12,000	11,800	8,800	92.9	817,400	1,968,400
Douglas	21,500	21,100	16,400	103.1	1,690,900	4,072,000
Franklin	18,600	18,200	16,000	95.1	1,522,200	3,665,700
Geary	2,100	2,100	1,800	109.4	196,900	474,200
Johnson	12,000	11,800	10,500	102.5	1,076,600	2,592,600
Linn	8,000	7,900	6,400	85.8	548,900	1,321,800
Lyon	21,000	20,700	16,500	85.7	1,414,400	3,406,100
Miami	16,400	16,100	13,000	93.0	1,209,000	2,911,500
Morris	4,800	4,700	4,100	83.0	340,300	819,500
Osage	10,700	10,500	8,700	94.4	821,600	1,978,600
Shawnee	29,600	29,000	25,800	110.5	2,852,000	6,868,100
Wabaunsee	10,800	10,600	9,300	88.5	823,200	1,982,400
District total	190,000	186,500	155,700	96.5	15,023,000	36,178,000
Southeast District:						
Allen	9,500	9,200	6,500	85.7	557,300	1,425,900
Bourbon	9,100	8,900	7,000	83.7	585,700	1,498,600
Butler	6,300	6,000	2,900	78.1	226,400	579,300
Chautauqua	900	900	600	76.7	46,000	117,700
Cherokee	4,000	3,900	3,300	73.0	241,000	616,600
Cowley	800	800	300	78.0	23,400	59,900
Crawford	9,000	8,800	6,600	87.2	575,700	1,473,000
Elk	500	500	200	71.5	14,300	36,600
Greenwood	4,700	4,600	1,800	96.7	174,000	445,200
Labette	6,900	6,800	4,500	84.9	382,000	977,400
Montgomery	8,100	8,000	5,100	85.6	436,500	1,116,800
Neosho	5,600	5,500	4,600	85.2	392,000	1,003,000
Wilson	3,100	3,000	2,500	89.6	224,000	573,100
Woodson	2,500	2,400	2,100	90.8	190,700	487,900
District total	71,000	69,300	48,000	84.8	4,069,000	10,411,000
State	1,750,000	1,720,000	1,470,000	117.0	171,990,000	431,695,000

CORN, 1980

County	All Corn		Corn for Grain			
	Acres planted	Acres harvested	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
Northwest District:						
Cheyenne	25,500	24,800	22,900	97.9	2,241,400	7,228,300
Decatur	12,100	12,100	8,800	78.4	690,000	2,225,200
Graham	7,400	7,200	3,300	85.0	280,500	904,600
Norton	6,000	5,900	3,400	111.0	377,400	1,217,100
Rawlins	7,500	7,500	6,100	119.3	728,000	2,347,700
Sheridan	47,500	46,800	39,300	124.9	4,909,700	15,833,300
Sherman	54,000	53,400	46,600	105.2	4,902,700	15,810,700
Thomas	60,000	59,000	54,600	119.0	6,497,300	20,953,100
District total	220,000	216,700	185,000	111.5	20,627,000	66,520,000
West Central District:						
Gove	9,000	8,900	4,500	90.0	405,000	1,358,500
Greeley	16,900	16,900	16,900	107.4	1,814,700	6,087,100
Lane	7,800	7,800	3,400	105.4	358,300	1,201,900
Logan	8,400	8,200	8,200	105.5	864,700	2,900,500
Ness	600	600	300	75.0	22,500	75,500
Scott	29,300	29,300	19,900	95.4	1,897,800	6,365,800
Trego	1,200	600	300	70.0	21,000	70,400
Wallace	35,300	35,300	33,700	87.0	2,930,800	9,830,900
Wichita	41,500	41,500	39,800	103.8	4,131,200	13,857,400
District total	150,000	149,100	127,000	98.0	12,446,000	41,748,000
Southwest District:						
Clark	100	0	0			
Finney	109,000	108,500	108,000	125.9	13,601,100	47,111,100
Ford	29,300	29,100	25,300	97.0	2,453,500	8,498,400
Grant	34,000	34,000	32,900	136.7	4,496,600	15,575,200
Gray	78,000	78,000	64,800	126.6	8,201,200	28,407,100
Hamilton	6,400	4,200	4,000	110.0	440,000	1,524,100
Haskell	93,000	93,000	88,300	130.1	11,487,000	39,788,400
Hodgeman	6,400	6,400	2,800	95.0	266,000	921,400
Kearny	43,000	43,000	16,500	118.2	1,950,900	6,757,500
Meade	22,400	22,400	21,900	112.0	2,452,800	8,496,000
Morton	8,000	8,000	8,000	112.0	896,000	3,103,500
Seward	15,400	15,400	13,000	110.0	1,430,000	4,953,200
Stanton	38,000	38,000	36,300	109.5	3,975,400	13,769,900
Stevens	17,000	17,000	16,200	111.8	1,810,500	6,271,200
District total	500,000	497,000	438,000	122.1	53,461,000	185,177,000
North Central District:						
Clay	15,600	15,600	9,300	83.8	779,200	2,613,500
Cloud	11,500	11,500	8,200	58.4	478,500	1,604,900
Jewell	9,400	9,400	5,700	105.2	599,500	2,010,800
Mitchell	2,500	2,500	1,500	75.0	112,500	377,300
Osborne	4,100	4,100	600	105.0	63,000	211,300
Ottawa	2,500	2,500	400	65.0	26,000	87,200
Phillips	6,100	6,000	4,100	67.0	274,600	921,000
Republic	45,500	45,100	38,000	90.8	3,450,800	11,574,500
Rooks	1,200	600	0			
Smith	5,600	5,600	3,900	96.2	375,200	1,258,500
Washington	21,000	21,000	8,300	48.3	400,700	1,344,000
District total	125,000	123,900	80,000	82.0	6,560,000	22,003,000
Central District:						
Barton	12,500	12,500	12,000	87.1	1,045,200	3,609,700
Dickinson	10,500	9,600	1,000	40.3	40,300	139,200
Ellis	900	700	0			
Ellsworth	400	200	0			
Lincoln	800	700	0			
McPherson	12,000	12,000	6,600	82.5	544,500	1,880,500
Marion	8,600	7,400	0			
Rice	9,500	9,500	6,400	92.5	592,000	2,044,600
Rush	2,000	2,000	0			
Russell	800	400	0			
Saline	4,000	3,500	0			
District total	62,000	58,500	26,000	85.5	2,222,000	7,674,000

CORN, 1980—*Concluded*

County	All Corn		Corn for Grain			
	Acres planted	Acres harvested	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
South Central District:						
Barber	800	700	0			
Comanche	100	0	0			
Edwards	20,500	20,400	20,000	114.6	2,292,000	7,916,300
Harper	300	100	0			
Harvey	10,000	8,900	4,400	85.0	374,000	1,291,700
Kingman	2,000	1,700	0			
Kiowa	7,500	7,500	7,500	99.6	746,800	2,579,300
Pawnee	10,000	10,000	9,600	106.0	1,017,600	3,514,600
Pratt	18,500	18,500	16,500	105.4	1,739,000	6,006,200
Reno	6,800	6,800	3,800	70.0	266,000	918,700
Sedgwick	13,500	13,500	11,400	86.5	986,100	3,405,800
Stafford	17,500	17,500	14,000	96.0	1,344,000	4,641,900
Sumner	2,500	2,500	1,800	74.7	134,500	464,500
District total	110,000	108,100	89,000	100.0	8,900,000	30,739,000
Northeast District:						
Atchison	30,500	30,500	21,700	32.0	694,400	2,377,600
Brown	75,000	67,500	52,100	33.5	1,745,500	5,976,600
Doniphan	73,000	73,000	70,000	70.5	4,936,200	16,901,500
Jackson	18,700	16,300	7,200	26.4	189,800	649,900
Jefferson	41,000	37,200	24,100	23.1	556,500	1,905,400
Leavenworth	23,000	23,000	16,500	40.2	662,500	2,268,400
Marshall	12,000	9,800	4,000	40.4	161,600	553,300
Nemaha	31,200	30,300	12,000	28.7	344,100	1,178,200
Pottawatomie	20,600	20,600	15,100	54.2	818,000	2,800,800
Riley	9,000	9,000	2,500	37.9	94,700	324,200
Wyandotte	4,000	4,000	2,800	20.3	56,700	194,100
District total	338,000	321,200	228,000	45.0	10,260,000	35,130,000
East Central District:						
Anderson	21,000	18,800	5,700	21.7	123,700	429,700
Chase	4,200	4,200	400	35.8	14,300	49,700
Coffey	12,600	12,400	1,700	26.5	45,000	156,300
Douglas	24,000	23,100	10,500	28.4	297,800	1,034,500
Franklin	21,500	16,300	2,300	37.8	86,900	301,900
Geary	2,300	2,300	200	45.0	9,000	31,300
Johnson	10,000	6,600	2,700	21.1	57,100	198,400
Linn	8,600	5,600	400	40.0	16,000	55,600
Lyon	18,000	17,800	2,200	60.8	133,700	464,400
Miami	18,300	8,500	1,100	22.1	24,300	84,400
Morris	5,500	5,400	900	30.0	27,000	93,800
Osage	14,000	13,500	2,600	35.8	93,100	323,400
Shawnee	34,500	29,500	18,300	35.0	640,500	2,224,800
Wabaunsee	15,500	6,000	1,000	50.6	50,600	175,800
District total	210,000	170,000	50,000	32.4	1,619,000	5,624,000
Southeast District:						
Allen	9,100	9,100	300	35.0	10,500	38,100
Bourbon	12,200	12,100	2,100	28.0	58,800	213,600
Butler	6,900	6,900	0			
Chautauqua	700	600	400	19.0	7,600	27,600
Cherokee	4,500	3,500	2,000	18.0	36,000	130,800
Cowley	900	900	0			
Crawford	8,700	8,300	2,200	35.0	77,000	279,700
Elk	500	300	0			
Greenwood	3,600	3,500	400	50.3	20,100	73,000
Labette	5,100	5,000	1,700	45.0	76,500	277,900
Montgomery	8,000	6,600	3,600	25.0	90,000	326,900
Neosho	6,900	4,900	200	24.5	4,900	17,800
Wilson	4,200	3,300	2,900	19.0	55,100	200,100
Woodson	3,700	3,500	1,200	23.8	28,500	103,500
District total	75,000	68,500	17,000	27.4	465,000	1,689,000
State	1,790,000	1,713,000	1,240,000	94.0	116,560,000	396,304,000

CORN FOR SILAGE, 1979

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
Northwest District:				
Cheyenne	2,000	14.6	29,100	612,400
Decatur	600	14.0	8,400	176,800
Graham	2,600	16.8	43,700	919,600
Norton	400	15.5	6,200	130,500
Rawlins	400	21.3	8,500	178,900
Sheridan	11,200	21.1	236,500	4,976,900
Sherman	3,600	16.3	58,600	1,233,200
Thomas	2,100	19.6	41,200	867,000
District total	22,900	18.9	432,200	9,095,300
West Central District:				
Gove	2,700	15.8	42,700	768,600
Greeley	1,900	19.4	36,900	664,200
Lane	1,300	20.5	26,700	480,600
Logan	2,800	14.5	40,700	732,600
Ness	200	19.0	3,800	68,400
Scott	3,600	15.7	56,500	1,017,000
Trego	200	13.0	2,600	46,800
Wallace	3,500	13.3	46,400	835,200
Wichita	7,200	17.1	123,000	2,214,000
District total	23,400	16.2	379,300	6,827,400
Southwest District:				
Clark				
Finney	19,100	19.1	363,900	7,278,000
Ford	1,000	19.0	19,000	380,000
Grant	1,700	24.4	41,400	828,000
Gray	2,500	24.0	60,100	1,202,000
Hamilton	900	18.9	17,000	340,000
Haskell	10,600	22.5	238,000	4,760,000
Hodgeman	3,600	18.6	67,000	1,340,000
Kearny	6,700	18.4	123,300	2,466,000
Meade	3,800	19.2	72,800	1,456,000
Morton	900	20.6	18,500	370,000
Seward	2,100	20.2	42,500	850,000
Stanton	1,200	18.4	22,100	442,000
Stevens	700	18.4	12,900	258,000
District total	54,800	20.0	1,098,500	21,970,000
North Central District:				
Clay	1,400	20.2	28,300	583,000
Cloud	1,200	18.9	22,700	467,600
Jewell	2,000	17.1	34,100	702,500
Mitchell	500	13.0	6,500	133,900
Osborne	1,000	18.2	18,200	374,900
Ottawa	500	13.2	6,600	136,000
Phillips	700	17.7	12,400	255,400
Republic	4,800	13.9	66,900	1,378,000
Rooks	400	17.8	7,100	146,300
Smith	1,100	15.0	16,500	339,900
Washington	3,500	14.5	50,600	1,042,400
District total	17,100	15.8	269,900	5,559,900
Central District:				
Barton	2,700	18.1	48,800	951,600
Dickinson	8,000	13.6	109,000	2,125,500
Ellis	500	15.4	7,700	150,100
Ellsworth	100	17.0	1,700	33,200
Lincoln	700	12.3	8,600	167,700
McPherson	4,500	14.9	67,000	1,306,500
Marion	5,600	13.4	75,100	1,464,500
Rice	3,000	14.7	44,100	859,900
Rush	500	13.8	6,900	134,600
Russell				
Saline	1,700	12.5	21,200	413,400
District total	27,300	14.3	390,100	7,607,000

CORN FOR SILAGE, 1979—*Concluded*

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
South Central District:				
Barber	600	15.5	9,300	194,400
Comanche				
Edwards	5,800	16.0	93,000	1,943,700
Harper				
Harvey	1,400	16.3	22,800	476,500
Kingman	300	12.3	3,700	77,300
Kiowa	1,000	11.9	11,900	248,700
Pawnee	1,000	23.0	23,000	480,700
Pratt	7,600	20.1	153,100	3,199,800
Reno	3,900	10.6	41,400	865,300
Sedgwick	900	13.3	12,000	250,800
Stafford	3,400	12.8	43,500	909,200
Sumner	1,000	10.8	10,800	225,700
District total	26,900	15.8	424,500	8,872,100
Northeast District:				
Atchison	3,600	14.2	51,100	1,103,800
Brown	2,500	10.8	27,000	583,200
Doniphan	1,200	9.5	11,400	246,200
Jackson	300	10.7	3,200	69,100
Jefferson	2,300	17.3	39,700	857,500
Leavenworth	2,400	12.3	29,500	637,200
Marshall	2,100	10.9	22,900	494,600
Nemaha	4,000	11.1	44,500	961,200
Pottawatomie	1,200	17.8	21,300	460,100
Riley	1,500	20.3	30,500	658,800
Wyandotte	200	14.0	2,800	60,500
District total	21,300	13.3	283,900	6,132,200
East Central District:				
Anderson	1,600	9.3	14,800	281,200
Chase	2,000	12.4	24,800	471,200
Coffey	3,000	12.4	37,200	706,800
Douglas	4,600	12.6	58,100	1,103,900
Franklin	2,100	9.8	20,500	389,500
Geary	300	12.7	3,800	72,200
Johnson	1,200	12.4	14,900	283,100
Linn	1,500	8.9	13,400	254,600
Lyon	4,100	17.3	70,900	1,347,100
Miami	3,100	13.7	42,400	805,600
Morris	600	14.2	8,500	161,500
Osage	1,800	12.4	22,300	423,700
Shawnee	3,200	15.5	49,500	940,500
Wabaunsee	1,300	13.5	17,600	334,400
District total	30,400	13.1	398,700	7,575,300
Southeast District:				
Allen	2,700	12.8	34,500	676,200
Bourbon	1,700	8.6	14,700	288,100
Butler	3,100	10.6	33,000	646,800
Chautauqua	300	11.0	3,300	64,700
Cherokee	600	10.5	6,300	123,500
Cowley	500	12.4	6,200	121,500
Crawford	2,100	12.5	26,200	513,500
Elk	300	8.7	2,600	51,000
Greenwood	2,800	12.3	34,300	672,300
Labette	2,200	13.8	30,300	593,900
Montgomery	2,900	12.7	36,800	721,200
Neosho	900	8.9	8,000	156,800
Wilson	500	7.4	3,700	72,500
Woodson	300	10.0	3,000	58,800
District total	20,900	11.6	242,900	4,760,800
State	245,000	16.0	3,920,000	78,400,000

CORN FOR SILAGE, 1980

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
Northwest District:				
Cheyenne	1,900	16.7	31,700	792,500
Decatur	3,300	11.5	38,000	950,000
Graham	3,300	12.0	39,600	990,000
Norton	2,500	10.8	27,000	675,000
Rawlins	1,400	10.1	14,200	355,000
Sheridan	7,500	15.8	118,200	2,955,000
Sherman	6,800	16.2	110,200	2,755,000
Thomas	4,300	16.5	71,100	1,777,500
District total	31,000	14.5	450,000	11,250,000
West Central District:				
Gove	4,400	14.6	64,200	1,402,800
Greeley				
Lane	4,400	14.5	63,800	1,394,000
Logan				
Ness	300	15.0	4,500	98,300
Scott	9,400	12.0	112,800	2,464,700
Trego	300	14.0	4,200	91,800
Wallace	1,600	11.7	18,700	408,600
Wichita	1,600	18.0	28,800	629,300
District total	22,000	13.5	297,000	6,489,500
Southwest District:				
Clark				
Finney				
Ford	3,800	16.0	60,800	1,363,100
Grant	1,100	16.5	18,200	408,000
Gray	13,200	18.0	237,600	5,327,100
Hamilton				
Haskell	3,500	20.0	70,000	1,569,400
Hodgeman	3,600	20.0	72,000	1,614,200
Kearny	26,200	15.8	413,300	9,266,300
Meade	500	13.0	6,500	145,700
Morton				
Seward	2,400	16.5	39,600	887,800
Stanton	1,700	20.0	34,000	762,300
Stevens				
District total	56,000	17.0	952,000	21,343,900
North Central District:				
Clay	5,100	6.9	35,300	777,300
Cloud	3,300	6.7	22,000	484,400
Jewell	3,700	17.1	63,300	1,393,900
Mitchell	800	8.8	7,000	154,100
Osborne	3,500	16.4	57,400	1,264,000
Ottawa	2,100	7.4	15,500	341,300
Phillips	1,900	11.2	21,300	469,000
Republic	6,600	7.1	47,000	1,034,900
Rooks				
Smith	1,700	12.5	21,200	466,800
Washington	12,300	6.5	80,000	1,761,700
District total	41,000	9.0	370,000	8,147,400
Central District:				
Barton	500	12.0	6,000	132,500
Dickinson	8,400	7.5	63,000	1,391,100
Ellis	400	10.5	4,200	92,700
Ellsworth	200	8.5	1,700	37,500
Lincoln	700	6.7	4,700	103,800
McPherson	5,400	9.9	53,700	1,185,700
Marion	7,400	5.5	40,700	898,700
Rice	3,100	9.4	29,200	644,700
Rush	2,000	8.4	16,800	370,900
Russell	400	8.0	3,200	70,700
Saline	3,500	6.2	21,800	481,300
District total	32,000	7.7	245,000	5,409,600

CORN FOR SILAGE, 1980—*Concluded*

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
South Central District:				
Barber	700	13.0	9,100	206,600
Comanche				
Edwards	400	13.0	5,200	118,000
Harper	100	12.0	1,200	27,200
Harvey	4,500	10.8	48,500	1,101,000
Kingman	1,600	16.9	27,000	612,900
Kiowa				
Pawnee	400	15.0	6,000	136,200
Pratt	2,000	16.0	32,000	726,400
Reno	3,000	10.7	32,000	726,400
Sedgwick	2,100	13.1	27,500	624,300
Stafford	3,500	15.7	55,000	1,248,400
Sumner	700	5.0	3,500	79,500
District total	19,000	13.0	247,000	5,606,900
Northeast District:				
Atchison	8,800	10.5	92,500	1,711,100
Brown	11,100	8.1	89,800	1,661,300
Doniphan	3,000	10.0	30,000	555,000
Jackson	8,400	5.1	43,000	795,500
Jefferson	11,700	5.7	66,200	1,224,700
Leavenworth	5,700	7.6	43,600	806,600
Marshall	3,300	9.0	29,700	549,500
Nemaha	16,800	5.1	86,000	1,591,000
Pottawatomie	5,500	10.6	58,300	1,078,600
Riley	6,500	8.8	57,000	1,054,500
Wyandotte	1,200	9.1	10,900	201,700
District total	82,000	7.4	607,000	11,229,500
East Central District:				
Anderson	9,300	3.7	34,800	713,300
Chase	3,800	3.4	12,900	264,400
Coffey	7,800	2.7	20,700	424,300
Douglas	11,900	3.7	43,800	897,800
Franklin	12,000	5.1	61,000	1,250,400
Geary	2,000	6.6	13,200	270,600
Johnson	3,500	3.3	11,600	237,800
Linn	2,900	3.4	9,900	202,900
Lyon	14,900	4.1	61,800	1,266,800
Miami	5,900	5.8	34,000	696,900
Morris	4,500	3.2	14,300	293,100
Osage	9,300	5.9	55,000	1,127,400
Shawnee	10,900	6.6	71,900	1,474,000
Wabaunsee	300	3.7	1,100	22,500
District total	99,000	4.5	446,000	9,142,200
Southeast District:				
Allen	7,400	5.4	40,000	972,100
Bourbon	9,100	4.1	37,600	913,700
Butler	6,700	5.7	38,000	923,400
Chautauqua	200	5.0	1,000	24,300
Cherokee	800	3.9	3,100	75,300
Cowley	900	4.0	3,600	87,500
Crawford	3,800	5.5	20,800	505,400
Elk	100	4.0	400	9,700
Greenwood	3,100	5.4	16,700	405,800
Labette	2,800	6.0	16,800	408,200
Montgomery	2,800	5.1	14,200	345,100
Neosho	3,800	4.8	18,100	439,800
Wilson	200	4.0	800	19,400
Woodson	2,300	3.9	8,900	216,300
District total	44,000	5.0	220,000	5,346,000
State	426,000	9.0	3,834,000	83,965,000

CORN FOR GRAIN—IRRIGATED AND DRYLAND, 1979

County	Irrigated			Dryland		
	Acres harvested	Yield per acre, bushels	Production, bushels	Acres harvested	Yield per acre, bushels	Production, bushels
Northwest District:						
Cheyenne	22,500	124.1	2,792,000	1,300	40.5	52,600
Decatur	8,300	125.0	1,037,700	1,100	65.3	71,800
Graham	5,900	121.5	717,000	100	47.0	4,700
Norton	4,600	134.5	618,800	300	63.7	19,100
Rawlins	8,600	126.0	1,083,800	100	47.0	4,700
Sheridan	37,000	125.5	4,644,300	100	65.0	6,500
Sherman	58,900	122.0	7,187,100	200	46.5	9,300
Thomas	58,000	127.7	7,408,000	800	65.8	52,600
District total	203,800	125.1	25,488,700	4,000	55.3	221,300
West Central District:						
Gove	5,400	124.4	672,000	...	...	...
Greeley	17,000	117.6	1,999,400	1,000	52.7	52,700
Lane	7,500	124.8	936,300	1,500	56.0	84,000
Logan	7,400	117.1	866,500	900	51.2	46,100
Ness	500	105.0	52,500	...	...	...
Scott	30,100	132.0	3,972,200	600	54.2	32,500
Trego	1,200	107.9	129,500	100	51.0	5,100
Wallace	41,900	116.6	4,885,300	800	25.0	20,000
Wichita	37,700	116.9	4,405,400	700	55.0	38,500
District total	148,700	120.5	17,919,100	5,600	49.8	278,900
Southwest District:						
Clark	...	...	...	...	...	...
Finney	73,700	133.6	9,843,600	400	53.5	21,400
Ford	28,100	134.9	3,789,900	1,300	58.5	76,000
Grant	28,600	140.1	4,007,300	500	51.2	25,600
Gray	80,500	136.3	10,970,900	1,300	48.7	63,300
Hamilton	5,400	120.4	650,000	...	...	...
Haskell	84,600	136.8	11,572,000	...	...	...
Hodgeman	3,300	129.7	428,000	...	...	...
Kearny	27,300	141.1	3,852,700	200	51.0	10,200
Meade	21,700	130.0	2,821,800	200	51.0	10,200
Morton	7,500	139.1	1,043,300	1,500	51.2	76,800
Seward	11,300	128.0	1,446,000	...	...	...
Stanton	37,800	137.2	5,188,000	...	...	...
Stevens	19,100	129.5	2,473,000	...	...	...
District total	428,900	135.4	58,086,500	5,400	52.5	283,500
North Central District:						
Clay	9,000	126.8	1,141,400	600	75.0	45,000
Cloud	7,600	105.0	798,000	600	74.0	44,400
Jewell	6,000	134.1	804,400	100	52.0	5,200
Mitchell	1,700	97.2	165,300	100	54.0	5,400
Osborne	2,900	124.1	360,000	100	76.0	7,600
Ottawa	900	109.0	98,100	100	70.0	7,000
Phillips	3,400	134.2	456,200	300	60.7	18,200
Republic	30,200	122.2	3,690,300	2,800	76.2	213,300
Rooks	700	131.3	91,900	100	68.0	6,800
Smith	3,300	133.6	440,800	100	53.0	5,300
Washington	7,000	126.9	888,100	4,400	78.5	345,300
District total	72,700	122.9	8,934,500	9,300	75.6	703,500
Central District:						
Barton	12,500	134.7	1,683,600	300	51.3	15,400
Dickinson	800	134.6	107,700	2,200	74.0	162,900
Ellis	600	103.3	62,000	...	...	...
Ellsworth	300	113.0	33,900	...	...	...
Lincoln	200	109.5	21,900	100	59.0	5,900
McPherson	7,700	124.7	960,200	300	56.7	17,000
Marion	700	137.4	96,200	2,400	67.0	160,800
Rice	7,200	129.7	933,800	...	...	...
Rush	1,600	114.3	182,800	100	31.0	3,100
Russell	300	125.0	37,500	700	63.9	44,700
Saline	1,200	104.8	125,700	1,000	65.9	65,900
District total	33,100	128.3	4,245,300	7,100	67.0	475,700

CORN FOR GRAIN—IRRIGATED AND DRYLAND, 1979—*Concluded*

County	Irrigated			Dryland		
	Acres harvested	Yield per acre, bushels	Production, bushels	Acres harvested	Yield per acre, bushels	Production, bushels
South Central District:						
Barber	400	130.0	52,000			
Comanche						
Edwards	16,500	136.2	2,247,100	500	62.6	31,300
Harper				100	62.0	6,200
Harvey	7,900	128.1	1,011,600	800	63.5	50,800
Kingman	1,500	120.0	180,000			
Kiowa	7,600	131.6	999,800	100	60.0	6,000
Pawnee	8,000	132.1	1,056,900	100	63.0	6,300
Pratt	13,400	136.2	1,824,800	500	62.6	31,300
Reno	3,200	127.0	406,500	300	61.3	18,400
Sedgwick	15,100	117.9	1,780,100	200	63.0	12,600
Stafford	14,900	137.2	2,044,200	500	41.0	20,500
Sumner	600	135.0	81,000	500	62.4	31,200
District total	89,100	131.1	11,684,000	3,600	59.6	214,600
Northeast District:						
Atchison	300	[illegible]	37,600	18,800	92.2	1,733,800
Brown	400	[illegible]	50,800	65,700	97.8	6,423,900
Doniphan	400	127.0	50,800	57,200	103.2	5,901,300
Jackson	100	127.0	12,700	14,300	83.6	1,195,600
Jefferson	800	125.5	100,400	26,500	91.2	2,417,100
Leavenworth	200	118.5	23,700	17,200	93.1	1,602,000
Marshall	700	113.4	79,400	10,100	73.0	737,000
Nemaha	300	127.3	38,200	16,000	82.7	1,323,200
Pottawatomie	7,800	129.5	1,009,800	10,000	81.3	812,800
Riley	1,700	123.1	209,200	3,700	91.5	338,600
Wyandotte				2,800	94.5	264,500
District total	12,700	127.0	1,612,600	242,300	93.9	22,749,800
East Central District:						
Anderson	1,800	107.9	194,200	14,200	91.2	1,294,500
Chase	300	120.0	36,000	2,100	88.0	184,900
Coffey				8,800	92.9	817,400
Douglas	500	133.0	66,500	15,900	102.2	1,624,400
Franklin	1,300	117.5	152,700	14,700	93.2	1,369,500
Geary	1,000	123.4	123,400	800	91.9	73,500
Johnson				10,500	102.5	1,076,600
Linn				6,400	85.8	548,900
Lyon	300	100.0	30,000	16,200	85.5	1,384,400
Miami				13,000	93.0	1,209,000
Morris	500	102.0	51,000	3,600	80.4	289,300
Osage	600	117.0	70,200	8,100	92.8	751,400
Shawnee	10,200	128.1	1,306,400	15,600	99.1	1,545,600
Wabaunsee	2,400	101.3	243,200	6,900	84.1	580,000
District Total	18,900	120.3	2,273,600	136,800	93.2	12,749,400
Southeast District:						
Allen	100	100.0	10,000	6,400	85.5	547,300
Bourbon	400	109.5	43,800	6,600	82.1	541,900
Butler	100	97.0	9,700	2,800	77.4	216,700
Chautauqua				600	76.7	46,000
Cherokee	100	106.0	10,600	3,200	72.0	230,400
Cowley				300	78.0	23,400
Crawford	200	128.5	25,700	6,400	85.9	550,000
Elk				200	71.5	14,300
Greenwood	700	116.9	81,800	1,100	83.8	92,200
Labette	1,400	110.1	154,200	3,100	73.5	227,800
Montgomery	600	130.5	78,300	4,500	79.6	358,200
Neosho	400	106.3	42,500	4,200	83.2	349,500
Wilson				2,500	89.6	224,000
Woodson				2,100	90.8	190,700
District Total	4,000	114.2	456,600	44,000	82.1	3,612,400
State	1,011,900	129.3	130,700,900	458,100	90.1	41,289,100

CORN FOR GRAIN—IRRIGATED AND DRYLAND, 1980

County	Irrigated			Dryland		
	Acres harvested	Yield per acre, bushels	Production, bushels	Acres harvested	Yield per acre, bushels	Production, bushels
Northwest District:						
Cheyenne	22,900	97.9	2,241,400			
Decatur	7,800	85.0	663,000	1,000	27.0	27,000
Graham	3,300	85.0	280,500			
Norton	3,400	111.0	377,400			
Rawlins	6,100	119.3	728,000			
Sheridan	39,300	124.9	4,909,700			
Sherman	46,600	105.2	4,902,700			
Thomas	54,600	119.0	6,497,300			
District total	184,000	112.0	20,600,000	1,000	27.0	27,000
West Central District:						
Gove	4,500	90.0	405,000			
Greeley	16,900	107.4	1,814,700			
Lane	3,400	105.4	358,300			
Logan	8,200	105.5	864,700			
Ness	300	75.0	22,500			
Scott	19,900	95.4	1,897,800			
Trego	300	70.0	21,000			
Wallace	33,700	87.0	2,930,800			
Wichita	39,800	103.8	4,131,200			
District total	127,000	98.0	12,446,000			
Southwest District:						
Clark						
Finney	108,000	125.9	13,601,100			
Ford	25,300	97.0	2,453,500			
Grant	32,900	136.7	4,496,600			
Gray	64,500	127.0	8,189,200	300	40.0	12,000
Hamilton	4,000	110.0	440,000			
Haskell	87,900	130.5	11,471,000	400	40.0	16,000
Hodgeman	2,800	95.0	266,000			
Kearny	16,500	118.2	1,950,900			
Meade	21,800	112.3	2,448,800	100	40.0	4,000
Morton	8,000	112.0	896,000			
Seward	13,000	110.0	1,430,000			
Stanton	36,300	109.5	3,975,400			
Stevens	16,000	112.7	1,802,500	200	40.0	8,000
District total	437,000	112.2	53,421,000	1,000	40.0	40,000
North Central District:						
Clay	9,300	83.8	779,200			
Cloud	7,700	60.5	466,000	500	25.0	12,500
Jewell	5,300	111.0	588,300	400	28.0	11,200
Mitchell	1,500	75.0	112,500			
Osborne	600	105.0	63,000			
Ottawa	400	65.0	26,000			
Phillips	3,900	68.6	267,600	200	35.0	7,000
Republic	34,600	97.8	3,382,800	3,400	20.0	68,000
Rooks						
Smith	3,500	104.0	364,000	400	28.0	11,200
Washington	4,200	68.0	285,600	4,100	28.1	115,100
District total	71,000	89.2	6,335,000	9,000	25.0	225,000
Central District:						
Barton	12,000	87.1	1,045,200			
Dickinson	200	85.5	17,100	800	29.0	23,200
Ellis						
Ellsworth						
Lincoln						
McPherson	6,600	82.5	544,500			
Marion						
Rice	6,200	94.5	586,200	200	29.0	5,800
Rush						
Russell						
Saline						
District total	25,000	87.7	2,193,000	1,000	29.0	29,000

CORN FOR GRAIN—IRRIGATED AND DRYLAND, 1980--*Concluded*

County	Irrigated			Dryland		
	Acres harvested	Yield per acre, bushels	Production, bushels	Acres harvested	Yield per acre, bushels	Production, bushels
South Central District:						
Barber						
Comanche						
Edwards	20,000	114.6	2,292,000			
Harper						
Harvey	3,900	86.4	337,100	500	73.8	36,900
Kingman						
Kiowa	7,500	99.6	746,800			
Pawnee	9,600	106.0	1,017,600			
Pratt	16,500	105.4	1,739,000			
Reno	2,600	70.9	184,400	1,200	68.0	81,600
Sedgwick	11,200	86.8	972,100	200	70.0	14,000
Stafford	14,000	96.0	1,344,000			
Sumner	700	90.0	63,000	1,100	65.0	71,500
District total	86,000	101.1	8,696,000	3,000	68.0	204,000
Northeast District:						
Atchison				21,700	32.0	694,400
Brown	200	76.5	15,300	51,900	33.3	1,730,200
Doniphan	1,000	76.0	76,000	69,000	70.4	4,860,200
Jackson				7,200	26.4	189,800
Jefferson	400	85.0	34,000	23,700	22.0	522,500
Leavenworth				16,500	40.2	662,500
Marshall	1,200	60.0	72,000	2,800	32.0	89,600
Nemaha				12,000	28.7	344,100
Pottawatomie	7,300	80.0	584,000	7,800	30.0	234,000
Riley	900	78.6	70,700	1,600	15.0	24,000
Wyandotte				2,800	20.3	56,700
District total	11,000	77.5	852,000	217,000	43.4	9,408,000
East Central District:						
Anderson	900	50.8	45,700	4,800	16.3	78,000
Chase	200	51.0	10,200	200	20.5	4,100
Coffey	400	50.8	20,300	1,300	19.0	24,700
Douglas	300	50.7	15,200	10,200	27.7	282,600
Franklin	900	54.3	48,900	1,400	27.1	38,000
Geary	200	45.0	9,000			
Johnson	100	51.0	5,100	2,600	20.0	52,000
Linn				400	40.0	16,000
Lyon	900	86.9	78,200	1,300	42.7	55,500
Miami	200	45.0	9,000	900	17.0	15,300
Morris				900	30.0	27,000
Osage	500	60.0	30,000	2,100	30.0	63,100
Shawnee	9,400	55.8	524,800	8,900	13.0	115,700
Wabaunsee	1,000	50.6	50,600			
District Total	15,000	56.5	847,000	35,000	22.1	772,000
Southeast District:						
Allen				300	35.0	10,500
Bourbon				2,100	28.0	58,800
Butler						
Chautauqua				400	19.0	7,600
Cherokee				2,000	18.0	36,000
Cowley						
Crawford	600	85.8	51,500	1,600	15.9	25,500
Elk						
Greenwood	300	62.0	18,600	100	15.0	1,500
Labette	600	70.8	42,500	1,100	30.9	34,000
Montgomery	500	74.8	37,400	3,100	17.0	52,600
Neosho				200	24.5	4,900
Wilson				2,900	19.0	55,100
Woodson				1,200	23.8	28,500
District Total	2,000	75.0	150,000	15,000	21.0	315,000
State	958,000	110.2	105,540,000	282,000	39.1	11,020,000

OATS, 1979

County	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
Northwest District:					
Cheyenne	1,000	510	43.1	22,000	35,500
Decatur	400	300	44.3	13,300	21,500
Graham	1,000	770	41.3	31,800	51,300
Norton	1,600	1,060	44.4	47,100	75,900
Rawlins	1,000	610	44.6	27,200	43,900
Sheridan	400	230	43.9	10,100	16,300
Sherman	900	480	41.7	20,000	32,300
Thomas	600	340	49.4	16,800	27,100
District total	6,900	4,300	43.8	188,300	303,800
West Central District:					
Gove	600	250	45.2	11,300	18,900
Greeley	900	380	37.4	14,200	23,900
Lane	300	120	48.3	5,800	9,700
Logan	800	330	35.2	11,600	19,400
Ness	300	120	43.3	5,200	8,700
Scott	100	40	37.5	1,500	2,500
Trego	400	170	37.7	6,400	10,700
Wallace	400	170	44.7	7,600	12,700
Wichita	300	120	32.5	3,900	6,500
District total	4,100	1,700	39.7	67,500	113,000
Southwest District:					
Clark	200	80	48.8	3,900	6,500
Finney	800	360	49.7	17,900	30,000
Ford	700	320	49.1	15,700	26,300
Grant	200	90	45.6	4,100	6,900
Gray	1,700	820	48.7	39,900	66,600
Hamilton	900	370	50.5	18,700	31,300
Haskell	100	40	47.5	1,900	3,200
Hodgeman	400	180	40.6	7,300	12,200
Kearny	100	40	47.5	1,900	3,200
Meade	400	160	45.6	7,300	12,200
Morton	400	190	40.5	7,700	12,900
Seward	800	360	45.8	16,500	27,600
Stanton	400	160	40.6	6,500	10,900
Stevens	300	130	40.8	5,300	8,900
District total	7,400	3,300	46.9	154,600	258,700
North Central District:					
Clay	2,200	1,460	36.6	53,400	85,100
Cloud	1,600	1,100	35.5	39,000	62,100
Jewell	1,800	900	36.6	32,900	52,400
Mitchell	600	310	38.7	12,000	19,100
Osborne	600	490	35.5	17,400	27,700
Ottawa	1,500	840	44.3	37,200	59,300
Phillips	1,200	370	43.8	16,200	25,800
Republic	1,700	1,220	34.8	42,500	67,700
Rooks	800	410	39.0	16,000	25,500
Smith	800	270	40.0	10,800	17,200
Washington	2,700	1,530	40.2	61,500	98,100
District total	15,500	8,900	38.1	338,900	540,000
Central District:					
Barton	600	490	39.6	19,400	32,700
Dickinson	6,000	4,250	37.8	160,800	270,800
Ellis	100	60	40.0	2,400	4,000
Ellsworth	600	490	43.3	21,200	35,700
Lincoln	800	620	38.1	23,600	39,700
McPherson	1,700	1,020	44.7	45,600	76,800
Marion	4,700	2,310	40.5	93,500	157,400
Rice	400	250	41.2	10,300	17,300
Rush	200	120	37.5	4,500	7,600
Russell	600	490	39.0	19,100	32,200
Saline	1,100	900	39.2	35,300	59,400
District total	16,800	11,000	39.6	435,700	733,600

OATS, 1979—*Concluded*

County	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
South Central District:					
Barber	800	520	38.3	19,900	33,100
Comanche	600	390	44.4	17,300	28,800
Edwards	400	200	44.5	8,900	14,800
Harper	400	310	38.7	12,000	20,000
Harvey	1,300	530	39.1	20,700	34,400
Kingman	3,300	1,340	42.2	56,600	94,200
Kiowa	900	380	43.4	16,500	27,400
Pawnee	400	200	41.0	8,200	13,600
Pratt	900	760	41.1	31,200	51,900
Reno	3,000	1,600	40.4	64,700	107,600
Sedgwick	900	480	39.2	18,800	31,300
Stafford	1,100	1,000	37.8	37,800	62,900
Sumner	800	490	43.7	21,400	35,600
District total	14,800	8,200	40.7	334,000	555,600
Northeast District:					
Atchison	1,500	1,230	47.4	58,300	92,300
Brown	3,200	2,720	39.9	108,400	171,600
Doniphan	900	650	49.4	32,100	50,800
Jackson	2,200	1,690	44.0	74,300	117,600
Jefferson	1,200	680	46.5	31,600	50,000
Leavenworth	1,700	960	49.5	47,500	75,200
Marshall	2,800	1,770	41.9	74,200	117,500
Nemaha	4,300	2,860	44.6	127,500	202,000
Pottawatomie	1,700	1,160	39.6	45,900	72,700
Riley	1,600	820	45.4	37,200	58,900
Wyandotte	100	60	36.7	2,200	3,500
District total	21,200	14,600	43.8	639,200	1,012,100
East Central District:					
Anderson	2,000	1,630	51.5	84,000	141,500
Chase	1,200	490	48.2	23,600	39,700
Coffey	1,300	1,130	45.2	51,100	86,000
Douglas	1,100	870	44.7	38,900	65,500
Franklin	2,100	1,500	48.3	72,400	121,900
Geary	1,100	790	45.2	35,700	60,100
Johnson	800	680	49.3	33,500	56,400
Linn	1,700	960	56.9	54,600	91,900
Lyon	1,200	860	44.3	38,100	64,100
Miami	1,500	1,200	52.7	63,200	106,400
Morris	2,100	1,500	40.8	61,200	103,000
Osage	1,200	1,000	44.3	44,300	74,600
Shawnee	900	640	40.6	26,000	43,800
Wabaunsee	2,100	1,450	40.6	58,900	99,200
District total	20,300	14,700	46.6	685,500	1,154,100
Southeast District:					
Allen	2,000	1,340	46.3	62,100	103,900
Bourbon	1,900	1,360	44.2	60,100	100,600
Butler	2,900	1,350	45.6	61,500	102,900
Chautauqua	1,700	800	45.9	36,700	61,400
Cherokee	900	810	41.0	33,200	55,600
Cowley	1,700	1,130	50.3	56,800	95,100
Crawford	2,800	2,450	51.8	126,900	212,400
Elk	700	470	49.6	23,300	39,000
Greenwood	1,700	1,060	50.5	53,500	89,500
Labette	4,300	2,370	46.9	111,100	185,900
Montgomery	2,300	1,710	51.7	88,400	148,000
Neosho	3,300	2,530	53.9	136,400	228,300
Wilson	1,000	540	52.4	28,300	47,400
Woodson	800	380	47.4	18,000	30,100
District total	28,000	18,300	49.0	896,300	1,500,100
State	135,000	85,000	44.0	3,740,000	6,171,000

OATS, 1980

County	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
Northwest District:					
Cheyenne	1,300	640	30.0	19,200	34,200
Decatur	500	470	35.7	16,800	29,900
Graham	1,300	770	37.5	28,900	51,400
Norton	2,200	650	34.8	22,600	40,300
Rawlins	1,300	450	44.0	19,800	35,300
Sheridan	500	250	46.0	11,500	20,500
Sherman	1,200	1,030	25.5	26,300	46,900
Thomas	1,500	740	30.7	22,700	40,500
District total	9,800	5,000	33.6	167,800	299,000
West Central District:					
Gove	800	230	27.4	6,300	11,400
Greeley	1,200	580	35.7	20,700	37,300
Lane	400	370	45.9	17,000	30,600
Logan	1,000	870	25.4	22,100	39,700
Ness	400	190	35.8	6,800	12,300
Scott	200	100	36.0	3,600	6,500
Trego	500	240	40.8	9,800	17,700
Wallace	500	430	35.8	15,400	27,700
Wichita	400	190	41.1	7,800	14,100
District total	5,400	3,200	34.2	109,500	197,300
Southwest District:					
Clark	300	240	42.5	10,200	18,200
Finney	1,000	490	42.7	20,900	37,200
Ford	900	270	42.6	11,500	20,500
Grant	300	150	42.0	6,300	11,200
Gray	2,300	650	41.7	27,100	48,300
Hamilton	1,200	590	50.7	29,900	53,400
Haskell	200	60	45.0	2,700	4,800
Hodgeman	400	200	43.5	8,700	15,500
Kearny	100	50	40.0	2,000	3,600
Meade	400	200	43.0	8,600	15,300
Morton	400	200	35.0	7,000	12,500
Seward	1,100	650	40.8	26,500	47,200
Stanton	600	350	42.9	15,000	26,700
Stevens	400	200	43.0	8,600	15,300
District total	9,600	4,300	43.0	185,000	329,700
North Central District:					
Clay	3,100	2,410	37.3	90,000	160,400
Cloud	2,300	1,570	50.4	79,100	141,000
Jewell	2,200	1,500	30.0	45,000	80,200
Mitchell	700	610	42.3	25,800	46,000
Osborne	800	700	39.4	27,600	49,200
Ottawa	1,900	1,570	37.1	58,300	103,900
Phillips	1,500	1,170	40.0	46,800	83,400
Republic	2,400	1,980	30.6	60,600	108,000
Rooks	1,100	640	38.8	24,800	44,200
Smith	1,100	960	30.6	29,400	52,400
Washington	4,100	3,790	43.7	165,500	294,800
District total	21,200	16,900	38.6	652,900	1,163,500
Central District:					
Barton	1,100	540	30.2	16,300	29,700
Dickinson	7,600	5,150	31.5	162,300	295,700
Ellis	200	180	32.8	5,900	10,800
Ellsworth	900	350	28.0	9,800	17,900
Lincoln	1,100	860	35.5	30,500	55,600
McPherson	2,700	2,100	40.6	85,200	155,200
Marion	5,700	3,880	25.4	98,500	179,500
Rice	500	370	32.7	12,100	22,000
Rush	300	260	30.0	7,800	14,200
Russell	600	500	45.6	22,800	41,500
Saline	1,800	1,310	37.6	49,300	89,800
District total	22,500	15,500	32.3	500,500	911,900

OATS, 1980—*Concluded*

County	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
South Central District					
Barber	1,000	540	41.9	22,600	42,100
Comanche	800	390	51.0	19,900	37,100
Edwards	600	290	30.7	8,900	16,600
Harper	1,400	410	40.7	16,700	31,100
Harvey	1,700	1,080	27.6	29,800	55,500
Kingman	3,800	1,490	35.8	53,300	99,100
Kiowa	900	790	35.7	28,200	52,500
Pawnee	400	200	35.5	7,100	13,200
Pratt	1,100	590	34.7	20,500	38,200
Reno	4,000	1,170	31.6	37,000	68,900
Sedgwick	1,100	320	56.3	18,000	33,500
Stafford	1,400	1,300	39.8	51,700	96,300
Sumner	1,400	1,230	37.7	46,400	86,400
District total	19,600	9,800	36.7	360,100	670,500
Northeast District					
Atchison	1,900	1,300	30.6	39,800	76,900
Brown	3,800	3,310	47.4	157,000	303,400
Doniphan	900	660	51.1	32,700	63,200
Jackson	3,500	2,900	44.6	129,200	249,600
Jefferson	1,700	990	37.8	37,400	72,300
Leavenworth	2,200	1,610	39.2	63,100	121,900
Marshall	3,200	2,180	35.3	76,900	148,600
Nemaha	4,900	2,390	33.3	79,500	153,600
Pottawatomie	1,800	1,310	28.0	36,700	70,900
Riley	1,700	500	49.0	24,500	47,300
Wyandotte	200	150	53.3	8,000	15,500
District total	25,800	17,300	39.6	684,800	1,323,200
East Central District					
Anderson	2,400	1,990	38.3	76,200	149,500
Chase	1,500	1,030	31.7	32,600	64,000
Coffey	1,500	880	30.6	26,900	52,800
Douglas	1,600	1,410	50.3	70,900	139,100
Franklin	3,300	2,420	40.3	97,500	191,400
Geary	1,500	1,390	35.0	48,600	95,400
Johnson	900	830	49.9	41,400	81,200
Linn	2,200	1,930	46.3	89,300	175,200
Lyon	2,000	1,460	28.0	40,900	80,300
Miami	1,700	1,490	42.9	63,900	125,400
Morris	2,800	2,590	28.6	74,000	145,200
Osage	2,300	2,020	38.8	78,300	153,600
Shawnee	1,300	1,020	45.9	46,800	91,800
Wabaunsee	2,700	2,240	30.6	68,600	134,600
District total	27,700	22,700	37.7	855,900	1,679,500
Southeast District					
Allen	2,200	1,720	30.1	51,700	103,500
Bourbon	2,100	1,540	41.0	63,200	126,500
Butler	3,400	2,650	38.1	100,900	202,000
Chautauqua	2,100	1,740	45.1	78,500	157,200
Cherokee	1,200	1,050	50.1	52,600	105,300
Cowley	1,900	1,480	54.1	80,100	160,400
Crawford	3,200	2,740	44.1	120,800	241,900
Elk	1,000	730	48.2	35,200	70,500
Greenwood	2,000	780	38.1	29,700	59,500
Labette	5,700	4,170	43.1	179,600	359,600
Montgomery	2,300	1,790	36.1	64,600	129,300
Neosho	4,300	3,350	37.1	124,200	248,700
Wilson	1,100	860	39.1	33,600	67,300
Woodson	900	700	41.1	28,800	57,700
District total	33,400	25,300	41.2	1,043,500	2,089,400
State	175,000	120,000	38.0	4,560,000	8,664,000

SOYBEANS, 1979

County	Acres planted	Acres harvested for beans	Yield per acre, bushels	Production, bushels	Farm value, dollars
Northwest District:					
Cheyenne	200	200	30.0	6,000	33,500
Decatur					
Graham	•	•	•	•	•
Norton	•	•	•	•	•
Rawlins	380	380	29.2	11,100	61,900
Sheridan	1,300	1,300	28.9	37,600	209,600
Sherman	1,200	1,200	29.7	35,600	198,400
Thomas	210	210	31.0	6,500	36,300
District total	3,400	3,400	29.4	99,900	557,000
West Central District:					
Gove	130	130	26.2	3,400	19,300
Greeley					
Lane	•	•	•	•	•
Logan					
Ness	200	200	24.5	4,900	27,800
Scott	1,500	1,500	31.1	46,600	264,100
Trego	•	•	•	•	•
Wallace	900	900	23.3	21,000	119,000
Wichita	1,300	1,200	24.8	29,800	168,800
District total	4,100	4,000	26.9	107,600	609,700
Southwest District:					
Clark					
Finney	900	860	34.3	29,500	171,000
Ford	4,100	4,000	37.6	150,400	872,000
Grant	2,500	2,400	31.0	74,400	431,400
Gray	7,000	5,900	38.1	224,800	1,303,500
Hamilton					
Haskell	4,900	4,800	32.0	153,700	891,100
Hodgeman	250	230	37.8	8,700	50,400
Kearny	200	190	30.5	5,800	33,600
Meade	3,800	3,700	32.0	118,400	686,500
Morton	250	220	32.3	7,100	41,200
Seward	3,300	3,200	31.5	100,800	584,400
Stanton	2,600	2,400	32.0	76,800	445,300
Stevens	1,500	1,500	31.9	47,900	277,700
District total	31,300	29,400	34.0	998,300	5,788,100
North Central District:					
Clay	11,000	10,700	25.9	277,200	1,601,600
Cloud	4,400	4,400	23.5	103,500	598,000
Jewell	1,300	1,300	30.2	39,200	226,500
Mitchell	3,200	3,200	32.2	103,000	595,100
Osborne	520	520	35.4	18,400	106,300
Ottawa	700	700	23.1	16,200	93,600
Phillips	260	260	30.0	7,800	45,100
Republic	10,000	10,000	34.0	339,800	1,963,200
Rooks	120	120	30.0	3,600	20,800
Smith	1,200	1,200	31.6	37,900	219,000
Washington	10,900	10,900	30.7	334,500	1,932,600
District total	43,600	43,300	29.6	1,281,100	7,401,800
Central District:					
Barton	4,800	4,800	29.3	140,400	826,800
Dickinson	8,900	8,600	19.6	168,800	994,100
Ellis	100	100	25.0	2,500	14,700
Ellsworth	400	400	29.8	11,900	70,100
Lincoln	790	790	25.9	20,500	120,700
McPherson	11,600	11,500	29.6	340,900	2,007,600
Marion	10,300	9,600	22.2	213,200	1,255,500
Rice	2,900	2,900	23.3	67,600	398,100
Rush	490	490	29.8	14,600	86,000
Russell	120	120	25.8	3,100	18,300
Saline	2,400	2,400	28.4	68,100	401,000
District total	42,800	41,700	25.2	1,051,600	6,192,900

SOYBEANS, 1979—*Concluded*

County	Acres planted	Acres harvested for beans	Yield per acre, bushels	Production, bushels	Farm value, dollars
South Central District					
Barber	950	950	30.4	28,900	172,800
Comanche	1,300	1,300	24.7	32,100	192,000
Edwards	17,000	17,000	26.9	457,700	2,737,100
Harper	150	150	20.0	3,000	17,900
Harvey	8,600	8,500	22.8	193,600	1,157,700
Kingman	2,300	2,300	32.0	73,500	439,500
Kiowa	9,500	9,500	34.8	330,700	1,977,600
Pawnee	10,800	10,800	32.7	353,600	2,114,600
Pratt	13,000	13,000	34.9	453,800	2,713,800
Reno	4,200	4,200	28.4	119,300	713,400
Sedgwick	13,200	13,200	27.2	359,300	2,148,600
Stafford	12,200	12,200	38.0	463,200	2,770,000
Sumner	6,800	6,800	24.5	166,300	994,500
District total	100,000	99,900	30.4	3,035,000	18,149,500
Northeast District:					
Atchison	38,000	37,800	31.9	1,206,300	7,177,200
Brown	64,000	62,100	31.7	1,969,200	11,716,100
Doniphan	49,000	49,000	37.1	1,817,000	10,810,700
Jackson	21,000	21,000	30.0	630,500	3,751,300
Jefferson	37,000	37,000	34.3	1,269,000	7,550,200
Leavenworth	28,000	28,000	34.6	968,700	5,763,500
Marshall	55,000	55,000	31.8	1,749,700	10,410,300
Nemaha	21,000	20,900	29.7	621,200	3,696,000
Pottawatomie	14,000	13,900	30.6	425,600	2,532,200
Riley	6,300	6,200	34.0	210,800	1,254,200
Wyandotte	2,300	2,300	35.6	81,900	487,300
District total	335,600	333,200	32.9	10,949,900	65,149,000
East Central District:					
Anderson	65,000	63,100	23.1	1,457,000	8,698,200
Chase	7,700	7,700	31.8	245,200	1,463,800
Coffey	64,000	63,700	23.1	1,470,900	8,781,200
Douglas	35,600	35,500	35.7	1,268,400	7,572,300
Franklin	63,000	62,600	28.9	1,806,800	10,786,400
Geary	3,900	3,900	28.0	109,100	651,300
Johnson	28,000	27,900	39.0	1,088,500	6,498,300
Linn	49,000	48,600	22.5	1,093,200	6,526,300
Lyon	29,400	29,000	30.8	891,900	5,324,600
Miami	46,600	46,300	31.6	1,460,800	8,720,900
Morris	4,900	4,900	30.2	147,800	882,400
Osage	48,000	47,300	26.9	1,271,100	7,588,400
Shawnee	14,200	14,100	31.6	444,900	2,656,000
Wabaunsee	7,100	7,100	30.5	216,900	1,294,900
District total	466,400	461,700	28.1	12,972,500	77,445,000
Southeast District:					
Allen	56,000	55,400	22.2	1,228,200	7,419,300
Bourbon	41,000	39,800	20.9	830,900	5,019,300
Butler	15,000	14,700	21.6	317,100	1,915,500
Chautauqua	3,200	3,200	21.3	68,100	411,400
Cherokee	122,000	120,400	19.5	2,346,200	14,172,900
Cowley	3,500	3,300	16.6	54,800	331,000
Crawford	70,000	69,000	19.5	1,344,500	8,121,900
Elk	11,900	11,900	23.3	276,800	1,672,100
Greenwood	17,600	17,600	27.4	482,900	2,917,100
Labette	63,000	62,000	17.3	1,072,500	6,478,800
Montgomery	30,000	29,000	17.2	498,800	3,013,100
Neosho	52,000	50,500	19.0	958,900	5,792,500
Wilson	40,000	39,500	19.0	750,100	4,531,200
Woodson	27,600	27,100	22.7	614,300	3,710,900
District total	552,800	543,400	20.0	10,844,100	65,507,000
State	1,580,000	1,560,000	26.5	41,340,000	246,800,000

*Counties with planted acreage of less than 100 acres not shown separately, but included in district and state totals.

SOYBEANS, 1980

County	Acres planted	Acres harvested for beans	Yield per acre, bushels	Production, bushels	Farm value, dollars
Northwest District:					
Cheyenne	1,600	1,500	32.1	48,200	354,000
Decatur					
Graham	•	•	•	•	•
Norton	•	•	•	•	•
Rawlins	230	220	30.9	6,800	50,100
Sheridan	2,800	2,600	31.1	80,900	593,100
Sherman	1,000	950	34.2	32,500	239,000
Thomas	600	560	36.3	20,300	149,000
District total	6,300	5,900	32.4	191,000	1,385,200
West Central District:					
Gove	250	240	30.0	7,200	52,900
Greeley					
Lane	270	260	26.2	6,800	50,000
Logan					
Ness	180	180	22.2	4,000	29,500
Scott	1,000	950	28.0	26,600	195,000
Trego	•	•	•	•	•
Wallace	400	390	40.0	15,600	114,000
Wichita	640	620	33.1	20,500	152,000
District total	2,800	2,700	30.6	82,500	606,600
Southwest District:					
Clark	•	•	•	•	•
Finney	700	650	41.1	26,700	200,000
Ford	4,200	3,900	34.9	136,300	1,022,000
Grant	2,800	2,700	39.1	105,500	791,000
Gray	5,500	5,100	38.0	193,800	1,453,000
Hamilton					
Haskell	3,400	3,200	28.8	92,100	691,000
Hodgeman	240	240	30.0	7,200	54,100
Kearny	870	830	35.1	29,100	218,000
Meade	2,300	2,100	29.8	62,600	469,000
Morton	170	160	35.0	5,600	42,000
Seward	2,000	1,800	41.1	74,000	555,000
Stanton	3,300	3,100	30.8	95,600	717,000
Stevens	1,400	1,300	39.1	50,800	381,000
District total	26,900	25,100	35.1	880,000	6,593,100
North Central District:					
Clay	12,300	10,800	14.8	159,300	1,197,000
Cloud	6,500	4,900	10.3	50,700	381,000
Jewell	1,300	1,200	18.8	22,500	169,000
Mitchell	2,500	2,200	12.0	26,300	198,000
Osborne	580	570	11.1	6,300	47,500
Ottawa	1,300	1,200	11.1	13,300	100,100
Phillips	240	230	22.2	5,100	38,300
Republic	16,000	15,700	19.2	301,900	2,268,000
Rooks	110	100	23.0	2,300	17,300
Smith	770	700	25.6	17,900	134,000
Washington	19,400	18,000	19.6	353,000	2,651,000
District total	61,000	55,600	17.2	958,600	7,201,200
Central District:					
Barton	6,000	5,600	29.4	164,800	1,250,000
Dickinson	6,600	6,500	13.1	85,000	644,000
Ellis	240	220	22.3	4,900	37,200
Ellsworth	550	510	17.8	9,100	69,200
Lincoln	780	780	10.8	8,400	63,800
McPherson	14,500	14,000	14.0	196,000	1,486,000
Marion	12,300	9,000	11.0	99,100	751,000
Rice	4,200	3,800	32.8	124,500	944,000
Rush	670	640	28.9	18,500	140,000
Russell	160	150	13.3	2,000	15,200
Saline	3,000	2,400	17.0	40,700	309,000
District total	49,000	43,600	17.3	753,000	5,709,400

SOYBEANS, 1980—*Concluded*

County	Acres planted	Acres harvested for beans	Yield per acre, bushels	Production, bushels	Farm value, dollars
South Central District:					
Barber	600	590	31.4	18,500	141,000
Comanche	1,000	990	24.3	24,100	183,000
Edwards	16,000	15,620	23.7	369,700	2,813,100
Harper	100	100	19.0	1,900	14,700
Harvey	8,600	8,000	13.0	104,000	792,000
Kingman	2,000	2,000	21.6	43,200	329,000
Kiowa	7,000	6,900	24.4	168,100	1,280,000
Pawnee	7,500	7,400	27.9	206,100	1,569,000
Pratt	9,000	8,900	20.9	186,000	1,416,000
Reno	4,000	4,000	18.0	72,000	548,000
Sedgwick	12,200	12,200	16.0	195,800	1,490,000
Stafford	9,000	8,900	23.0	204,500	1,557,000
Sumner	5,000	5,000	10.0	50,000	381,000
District total	82,000	80,600	20.4	1,643,900	12,513,800
Northeast District:					
Atchison	43,100	42,800	26.0	1,114,400	8,483,000
Brown	70,000	69,900	25.5	1,782,700	13,572,200
Doniphan	46,000	45,900	33.2	1,525,300	11,611,000
Jackson	21,700	21,100	23.2	488,600	3,719,000
Jefferson	37,000	36,400	26.1	949,300	7,226,000
Leavenworth	24,000	23,800	26.4	628,200	4,782,000
Marshall	65,000	63,900	19.6	1,253,400	9,541,000
Nemaha	22,800	22,700	19.8	449,600	3,422,000
Pottawatomie	13,000	12,400	23.3	289,400	2,203,000
Riley	6,000	6,000	17.0	102,100	777,000
Wyandotte	2,400	2,400	27.5	66,000	502,000
District total	351,000	347,300	24.9	8,649,000	65,838,200
East Central District:					
Anderson	60,000	52,100	9.6	501,500	3,823,000
Chase	7,100	5,600	11.4	63,900	487,000
Coffey	73,000	67,700	9.0	609,000	4,642,000
Douglas	30,200	29,300	20.2	592,800	4,518,000
Franklin	60,000	59,500	14.9	887,600	6,765,000
Geary	3,800	3,600	19.7	71,000	541,000
Johnson	31,600	31,400	24.9	780,400	5,948,000
Linn	48,800	41,800	8.5	354,700	2,704,000
Lyon	32,000	27,800	14.1	392,000	2,988,000
Miami	48,800	48,500	19.6	949,700	7,238,800
Morris	6,600	5,000	19.3	96,700	737,000
Osage	45,000	44,400	17.7	784,000	5,976,000
Shawnee	12,500	12,200	21.5	262,900	2,004,000
Wabaunsee	7,600	7,000	15.8	110,800	845,000
District total	467,000	435,900	14.8	6,457,000	49,216,800
Southeast District:					
Allen	61,000	54,900	9.8	535,600	4,072,000
Bourbon	43,400	37,600	6.9	260,600	1,981,000
Butler	16,600	12,600	9.7	122,100	928,000
Chautauqua	3,200	2,400	9.8	23,600	179,000
Cherokee	94,000	89,500	10.4	934,800	7,106,700
Cowley	2,400	2,100	9.6	20,100	153,000
Crawford	71,000	68,900	9.6	662,200	5,034,000
Elk	15,000	12,900	7.0	90,600	689,000
Greenwood	17,900	16,400	8.8	145,100	1,103,000
Labette	48,500	42,600	11.7	498,200	3,787,000
Montgomery	22,500	19,600	10.9	212,800	1,618,000
Neosho	54,000	40,700	7.0	283,300	2,154,000
Wilson	31,500	31,000	10.6	329,600	2,506,000
Woodson	23,000	22,100	8.7	191,400	1,455,000
District total	504,000	453,300	9.5	4,310,000	32,765,700
State	1,550,000	1,450,000	16.5	23,925,000	181,830,000

* Counties with planted acreage of less than 100 acres not shown separately, but included in district and state totals.

ALFALFA HAY, 1979

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
Northwest District:				
Cheyenne	6,000	3.8	22,800	1,088,000
Decatur	9,400	4.3	40,000	1,908,000
Graham	7,500	3.2	23,800	1,135,000
Norton	9,500	3.3	30,900	1,474,000
Rawlins	12,000	3.6	43,000	2,050,800
Sheridan	8,000	4.5	35,700	1,703,000
Sherman	5,500	4.4	24,100	1,150,000
Thomas	3,300	4.2	13,700	653,000
District total	61,200	3.82	234,000	11,161,800
West Central District:				
Gove	6,000	3.9	23,600	1,300,000
Greeley	1,300	4.2	5,400	298,000
Lane	3,500	3.2	11,100	612,000
Logan	1,200	3.5	4,200	231,000
Ness	4,500	2.7	12,200	672,000
Scott	5,300	4.3	23,000	1,267,000
Trego	5,000	2.7	13,700	755,000
Wallace	4,500	3.6	16,300	898,000
Wichita	7,100	4.5	31,800	1,752,600
District total	38,400	3.68	141,300	7,785,600
Southwest District:				
Clark	5,400	3.1	16,900	924,000
Finney	35,000	4.7	164,300	8,986,300
Ford	10,500	5.0	52,600	2,877,000
Grant	7,000	5.0	35,200	1,925,000
Gray	15,000	5.0	74,300	4,064,000
Hamilton	6,500	4.1	26,300	1,439,000
Haskell	7,000	5.2	36,100	1,975,000
Hodgeman	3,000	4.7	14,100	771,000
Kearny	9,600	4.4	42,500	2,325,000
Meade	11,000	5.1	56,300	3,080,000
Morton	1,500	4.3	6,500	356,000
Seward	9,000	4.1	36,600	2,002,000
Stanton	4,100	4.8	19,700	1,078,000
Stevens	4,500	4.6	20,800	1,138,000
District total	129,100	4.66	602,200	32,940,300
North Central District:				
Clay	10,000	3.2	31,600	1,466,000
Cloud	15,700	3.2	50,000	2,320,000
Jewell	15,600	3.3	51,400	2,385,000
Mitchell	8,000	2.8	22,100	1,025,000
Osborne	12,900	2.8	35,800	1,661,000
Ottawa	12,000	3.4	40,300	1,870,000
Phillips	21,000	2.8	59,600	2,765,800
Republic	14,500	3.6	51,800	2,404,000
Rooks	15,000	3.0	45,100	2,093,000
Smith	16,000	3.5	55,500	2,575,000
Washington	17,000	2.9	49,900	2,315,000
District total	157,700	3.13	493,100	22,879,800
Central District:				
Barton	34,500	3.2	111,000	5,861,000
Dickinson	21,000	3.2	67,300	3,553,000
Ellis	7,600	3.6	27,700	1,463,000
Ellsworth	8,000	2.6	20,500	1,082,000
Lincoln	16,500	3.4	56,600	2,988,000
McPherson	15,500	3.0	46,700	2,466,000
Marion	23,000	3.3	75,200	3,971,000
Rice	14,000	3.3	45,800	2,418,000
Rush	4,600	3.6	16,600	876,000
Russell	7,400	2.5	18,400	972,000
Saline	11,000	3.6	39,200	2,070,000
District total	163,100	3.22	525,000	27,720,000

ALFALFA HAY, 1979—*Concluded*

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
South Central District:				
Barber	9,000	3.2	28,600	1,607,000
Comanche	8,100	3.2	25,900	1,455,000
Edwards	18,000	3.3	59,700	3,354,000
Harper	7,500	3.5	26,200	1,472,000
Harvey	8,600	2.6	22,600	1,269,000
Kingman	10,500	2.9	30,200	1,696,000
Kiowa	5,000	4.8	23,800	1,337,000
Pawnee	35,000	3.2	111,400	6,256,200
Pratt	13,000	4.4	57,600	3,236,000
Reno	25,000	3.4	84,700	4,758,000
Sedgwick	22,000	3.4	75,400	4,235,000
Stafford	22,600	3.5	77,900	4,376,000
Sumner	13,000	2.7	35,400	1,989,000
District total	197,300	3.34	659,400	37,040,200
Northeast District:				
Atchison	4,500	3.0	13,700	644,000
Brown	5,300	4.5	24,000	1,128,000
Doniphan	3,000	3.6	10,900	512,000
Jackson	8,000	2.5	20,200	949,000
Jefferson	5,500	3.3	18,000	846,000
Leavenworth	7,500	3.3	24,900	1,170,000
Marshall	18,000	3.2	57,500	2,703,300
Nemaha	15,300	2.7	40,500	1,904,000
Pottawatomie	15,000	3.4	50,300	2,364,000
Riley	9,200	4.1	37,700	1,772,000
Wyandotte	1,000	2.2	2,200	103,000
District total	92,300	3.25	299,900	14,095,300
East Central District:				
Anderson	6,500	3.9	25,000	1,382,000
Chase	9,000	3.3	30,100	1,665,000
Coffey	5,400	2.5	13,700	758,000
Douglas	5,000	4.1	20,600	1,139,000
Franklin	4,500	3.0	13,500	747,000
Geary	6,000	3.6	21,300	1,178,000
Johnson	2,000	3.4	6,800	376,000
Linn	2,700	3.1	8,400	465,000
Lyon	7,000	3.1	21,700	1,200,000
Miami	4,500	2.5	11,400	630,000
Morris	15,000	3.1	46,900	2,592,900
Osage	3,500	2.7	9,600	531,000
Shawnee	5,500	4.6	25,500	1,410,000
Wabaunsee	10,500	3.8	40,200	2,223,000
District total	87,100	3.38	294,700	16,296,900
Southeast District:				
Allen	5,500	3.3	18,100	1,001,000
Bourbon	2,700	3.6	9,600	531,000
Butler	15,500	3.0	46,700	2,583,100
Chautauqua	4,300	4.1	17,700	979,000
Cherokee	300	4.7	1,400	77,000
Cowley	13,200	3.3	43,400	2,400,000
Crawford	1,700	3.3	5,600	310,000
Elk	5,500	3.3	18,200	1,006,000
Greenwood	7,700	4.2	32,400	1,792,000
Labette	1,200	3.4	4,100	227,000
Montgomery	3,500	3.8	13,200	730,000
Neosho	2,200	3.1	6,800	376,000
Wilson	7,500	3.1	23,300	1,288,000
Woodson	3,000	3.3	9,900	547,000
District total	73,800	3.39	250,400	13,847,100
State	1,000,000	3.50	3,500,000	183,767,000

ALFALFA HAY, 1980

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
Northwest District:				
Cheyenne	6,100	3.9	24,000	1,440,800
Decatur	10,600	3.1	32,800	1,969,200
Graham	8,600	2.1	18,200	1,092,600
Norton	7,600	3.1	23,800	1,428,800
Rawlins	10,000	3.7	37,400	2,245,400
Sheridan	8,100	2.8	22,900	1,374,800
Sherman	5,800	4.2	24,500	1,470,900
Thomas	3,000	4.2	12,500	750,400
District total	59,800	3.28	196,100	11,772,900
West Central District:				
Gove	5,000	3.7	18,700	1,130,600
Greeley	1,100	3.9	4,300	260,000
Lane	3,300	2.6	8,500	513,900
Logan	1,000	3.0	3,000	181,400
Ness	4,600	3.1	14,300	864,600
Scott	4,700	3.3	15,600	943,200
Trego	5,300	2.3	12,200	737,600
Wallace	3,700	4.3	15,900	961,300
Wichita	5,900	4.1	24,200	1,463,200
District total	34,600	3.37	116,700	7,055,800
Southwest District:				
Clark	6,400	3.4	21,600	1,331,200
Finney	31,200	4.7	146,500	9,028,600
Ford	11,400	4.5	51,100	3,149,200
Grant	6,800	3.9	26,600	1,639,300
Gray	18,000	5.1	92,000	5,669,800
Hamilton	7,800	4.3	33,500	2,064,600
Haskell	7,600	5.1	38,800	2,391,200
Hodgeman	2,400	3.7	8,800	542,300
Kearny	9,400	3.8	36,000	2,218,600
Meade	11,000	3.6	39,600	2,440,500
Morton	1,800	3.5	6,300	388,300
Seward	10,800	4.9	52,400	3,229,300
Stanton	4,900	4.4	21,500	1,325,000
Stevens	5,400	4.7	25,100	1,546,900
District total	134,900	4.45	599,800	36,964,800
North Central District:				
Clay	8,000	1.9	15,400	946,500
Cloud	15,300	2.8	42,100	2,587,500
Jewell	12,500	2.8	35,100	2,157,300
Mitchell	7,400	2.0	14,800	909,600
Osborne	12,000	3.1	37,500	2,304,800
Ottawa	12,200	2.3	27,700	1,702,400
Phillips	23,800	2.4	56,100	3,447,900
Republic	15,000	3.1	46,200	2,839,500
Rooks	13,600	2.8	37,900	2,329,300
Smith	16,400	2.7	43,700	2,685,800
Washington	16,700	2.1	34,400	2,114,200
District total	152,900	2.56	390,900	24,024,800
Central District:				
Barton	34,100	2.5	86,300	5,339,000
Dickinson	18,000	2.2	38,700	2,394,200
Ellis	7,700	2.9	22,200	1,373,400
Ellsworth	7,700	1.8	13,800	853,800
Lincoln	14,700	2.8	40,600	2,511,800
McPherson	18,000	2.7	48,200	2,981,900
Marion	21,800	1.6	34,900	2,159,100
Rice	15,800	2.2	34,900	2,159,100
Rush	5,000	3.6	18,000	1,113,600
Russell	8,100	2.0	15,800	977,500
Saline	10,800	2.6	28,500	1,763,200
District total	161,700	2.36	381,900	23,626,600

ALFALFA HAY, 1980—*Concluded*

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
South Central District:				
Barber	8,100	2.8	22,300	1,371,900
Comanche	7,300	2.9	21,100	1,298,100
Edwards	21,600	4.0	85,800	5,278,400
Harper	6,600	3.7	24,500	1,507,200
Harvey	7,600	2.6	19,700	1,211,900
Kingman	10,300	2.5	26,000	1,599,500
Kiowa	4,100	2.6	10,600	652,100
Pawnee	37,600	3.9	146,800	9,031,100
Pratt	14,200	2.9	41,700	2,565,400
Reno	23,200	3.3	76,400	4,700,100
Sedgwick	24,200	2.4	58,300	3,586,600
Stafford	23,900	3.1	74,800	4,601,700
Sumner	15,600	1.9	29,700	1,827,100
District total	204,300	3.12	637,700	39,231,100
Northeast District:				
Atchison	4,500	2.6	11,900	713,000
Brown	6,300	2.8	17,900	1,072,500
Doniphan	3,600	3.6	12,900	772,900
Jackson	6,400	2.1	13,700	820,900
Jefferson	6,600	2.7	17,700	1,060,500
Leavenworth	8,600	2.2	19,300	1,156,400
Marshall	17,700	2.0	35,300	2,115,200
Nemaha	17,000	2.0	33,700	2,019,200
Pottawatomie	12,100	2.6	31,500	1,887,400
Riley	11,000	2.5	27,300	1,635,700
Wyandotte	800	2.9	2,300	137,800
District total	94,600	2.36	223,500	13,391,500
East Central District:				
Anderson	6,000	2.0	11,900	732,400
Chase	7,600	2.0	15,200	935,600
Coffey	5,400	1.0	5,400	332,400
Douglas	4,200	2.5	10,400	640,100
Franklin	3,800	2.0	7,600	467,800
Geary	6,200	2.3	14,400	886,300
Johnson	2,100	2.1	4,500	277,000
Linn	2,300	1.3	2,900	178,500
Lyon	5,900	1.8	10,400	640,100
Miami	3,800	1.8	6,900	424,700
Morris	15,200	1.7	26,000	1,600,300
Osage	3,000	2.0	6,100	375,500
Shawnee	4,700	3.5	16,500	1,015,600
Wabaunsee	12,600	2.1	26,700	1,643,200
District total	82,800	1.99	164,900	10,149,500
Southeast District:				
Allen	4,400	1.4	6,000	370,000
Bourbon	2,600	1.9	4,900	302,200
Butler	14,200	1.7	23,800	1,467,700
Chautauqua	5,100	2.1	10,900	672,200
Cherokee	300	2.0	600	37,000
Cowley	14,200	2.5	35,900	2,213,900
Crawford	1,400	1.1	1,500	92,500
Elk	5,800	1.8	10,600	653,700
Greenwood	8,400	1.9	15,600	962,000
Labette	1,000	1.9	1,900	117,200
Montgomery	3,500	2.1	7,300	450,200
Neosho	1,900	2.0	3,800	234,300
Wilson	8,300	1.4	11,900	733,800
Woodson	3,300	1.2	3,800	234,300
District total	74,400	1.86	138,500	8,541,000
State	1,000,000	2.85	2,850,000	174,758,000

ALL OTHER HAY, 1979[1]

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
Northwest District:				
Cheyenne	2,500	2.8	7,000	274,400
Decatur	2,500	2.9	7,300	286,200
Graham	3,000	2.1	6,400	250,900
Norton	2,700	2.7	7,300	286,200
Rawlins	2,000	2.9	5,800	227,400
Sheridan	1,700	2.9	4,900	192,100
Sherman	1,500	2.2	3,300	129,400
Thomas	3,100	2.7	8,500	333,000
District total	19,000	2.66	50,500	1,979,600
West Central District:				
Gove	1,700	1.5	2,600	100,100
Greeley	2,700	2.4	6,500	250,300
Lane	1,600	2.9	4,700	181,000
Logan	4,000	1.5	6,000	231,000
Ness	4,500	2.8	12,600	484,900
Scott	2,500	2.8	7,100	273,400
Trego	3,000	2.8	8,500	327,300
Wallace	1,000	2.4	2,400	92,400
Wichita	1,600	2.9	4,700	181,000
District total	22,600	2.44	55,100	2,121,400
Southwest District:				
Clark	2,500	1.5	3,700	164,300
Finney	1,700	2.5	4,300	190,900
Ford	2,500	2.4	6,100	270,800
Grant	900	2.0	1,800	79,900
Gray	2,600	2.5	6,600	293,000
Hamilton	1,500	1.6	2,400	106,600
Haskell	400	2.0	800	35,500
Hodgeman	3,200	2.8	8,800	390,800
Kearny	1,000	2.8	2,800	124,300
Meade	3,000	1.5	4,400	195,400
Morton	1,700	1.5	2,500	111,000
Seward	1,000	1.5	1,500	66,600
Stanton	1,500	1.7	2,600	115,400
Stevens	700	1.4	1,000	44,400
District total	24,200	2.04	49,300	2,188,900
North Central District:				
Clay	12,000	1.9	23,100	929,800
Cloud	8,000	1.5	12,100	487,000
Jewell	10,000	1.7	17,200	692,300
Mitchell	4,100	2.5	10,400	418,600
Osborne	7,000	1.7	12,000	483,000
Ottawa	9,000	1.7	15,500	623,900
Phillips	8,500	2.1	18,100	728,500
Republic	7,000	2.1	14,900	599,700
Rooks	3,000	2.2	6,700	269,700
Smith	8,000	2.2	17,800	716,400
Washington	19,000	1.6	30,600	1,231,700
District total	95,600	1.87	178,400	7,180,600
Central District:				
Barton	6,000	2.1	12,600	544,900
Dickinson	18,500	1.8	33,300	1,440,200
Ellis	4,500	2.9	13,100	566,600
Ellsworth	11,500	1.5	17,300	748,200
Lincoln	9,000	2.6	23,400	1,012,000
McPherson	9,200	2.0	18,400	795,800
Marion	21,500	1.9	40,800	1,764,800
Rice	2,600	1.7	4,400	190,300
Rush	3,000	1.8	5,400	233,500
Russell	9,000	1.8	16,200	700,600
Saline	7,000	1.6	11,200	484,400
District total	101,800	1.93	196,100	8,481,300

ALL OTHER HAY, 1979[1]—*Concluded*

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
South Central District:				
Barber	4,000	2.1	8,400	401,500
Comanche	800	1.6	1,300	62,100
Edwards	1,200	2.9	3,500	167,300
Harper	6,500	2.0	13,000	621,400
Harvey	6,200	1.8	11,200	535,400
Kingman	8,500	1.7	14,500	693,100
Kiowa	3,200	2.0	6,400	305,900
Pawnee	1,400	2.9	4,100	196,000
Pratt	1,500	1.8	2,700	129,100
Reno	4,500	2.1	9,500	454,100
Sedgwick	10,000	1.8	17,900	855,500
Stafford	2,100	2.9	6,100	291,600
Sumner	8,000	1.9	15,200	726,600
District total	57,900	1.97	113,800	5,439,600
Northeast District:				
Atchison	18,500	2.1	39,500	1,544,500
Brown	15,500	2.0	31,600	1,235,600
Doniphan	4,000	2.5	10,100	394,900
Jackson	45,400	1.8	83,700	3,272,500
Jefferson	26,000	1.8	47,900	1,872,900
Leavenworth	23,500	1.8	43,300	1,693,000
Marshall	20,000	1.8	34,900	1,364,600
Nemaha	17,000	1.8	29,700	1,161,300
Pottawatomie	34,000	1.5	49,500	1,935,500
Riley	10,000	1.6	15,500	606,100
Wyandotte	2,500	2.0	5,100	199,400
District total	216,400	1.81	390,800	15,280,300
East Central District:				
Anderson	39,000	1.8	70,500	3,091,400
Chase	10,500	1.7	17,900	784,900
Coffey	39,000	1.6	62,600	2,745,000
Douglas	25,500	1.8	46,100	2,021,500
Franklin	30,000	2.0	60,200	2,639,800
Geary	6,000	1.8	10,800	473,600
Johnson	16,500	2.0	33,100	1,451,400
Linn	31,500	1.9	60,100	2,635,400
Lyon	41,000	1.8	74,100	3,249,300
Miami	41,500	1.9	79,200	3,472,900
Morris	27,000	1.5	40,700	1,784,700
Osage	40,000	1.6	64,300	2,819,600
Shawnee	19,500	1.7	33,300	1,460,200
Wabaunsee	31,500	1.6	50,600	2,218,800
District total	398,500	1.77	703,500	30,848,500
Southeast District:				
Allen	29,500	1.9	55,700	2,399,300
Bourbon	34,800	1.5	51,900	2,235,600
Butler	48,000	1.5	71,500	3,079,700
Chautauqua	13,000	1.6	20,700	891,700
Cherokee	16,500	1.6	26,300	1,132,900
Cowley	19,000	1.9	35,900	1,546,400
Crawford	20,500	1.9	38,700	1,667,000
Elk	18,500	1.5	27,600	1,188,900
Greenwood	32,700	1.7	55,300	2,382,100
Labette	30,800	1.7	52,100	2,244,200
Montgomery	24,000	1.6	38,200	1,645,500
Neosho	21,000	1.8	37,600	1,619,600
Wilson	24,000	1.7	40,600	1,748,900
Woodson	31,700	1.6	50,400	2,171,000
District total	364,000	1.66	602,500	25,952,800
State	1,300,000	1.80	2,340,000	99,473,000

1. All types except Alfalfa.

ALL OTHER HAY, 1980[1]

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
Northwest District:				
Cheyenne	2,700	1.8	4,900	273,800
Decatur	2,000	1.6	3,100	173,200
Graham	2,600	1.0	2,700	150,900
Norton	2,900	1.8	5,300	296,100
Rawlins	2,100	2.4	5,000	279,400
Sheridan	1,800	2.3	4,200	234,700
Sherman	1,600	1.3	2,100	117,400
Thomas	2,700	1.7	4,600	257,100
District total	18,400	1.73	31,900	1,782,600
West Central District:				
Gove	2,000	1.1	2,100	117,400
Greeley	2,500	1.9	4,800	268,200
Lane	1,200	2.5	3,000	167,600
Logan	2,800	2.0	5,600	312,900
Ness	4,100	2.2	9,200	514,206
Scott	1,800	2.6	4,600	257,100
Trego	2,100	2.0	4,100	229,100
Wallace	900	1.7	1,500	83,800
Wichita	1,200	1.8	2,200	122,900
District total	18,600	1.99	37,100	2,073,200
Southwest District:				
Clark	2,700	1.7	4,500	259,800
Finney	1,800	1.3	2,300	132,800
Ford	2,600	2.8	7,200	415,700
Grant	800	2.3	1,800	103,900
Gray	2,800	2.3	6,300	363,800
Hamilton	1,600	2.3	3,700	213,600
Haskell	400	2.0	800	46,200
Hodgeman	3,500	2.4	8,400	485,100
Kearny	1,100	2.5	2,700	155,900
Meade	2,500	2.5	6,200	358,000
Morton	1,500	1.1	1,600	92,400
Seward	900	1.1	1,000	57,700
Stanton	1,300	0.8	1,000	57,700
Stevens	600	2.0	1,200	69,300
District total	24,100	2.02	48,700	2,811,900
North Central District:				
Clay	12,600	0.7	8,700	501,000
Cloud	8,400	0.7	5,800	334,000
Jewell	7,000	1.5	10,400	598,800
Mitchell	2,900	1.0	2,800	161,200
Osborne	7,300	1.3	9,200	529,800
Ottawa	9,200	0.9	8,200	472,200
Phillips	6,700	1.3	9,000	518,200
Republic	7,300	1.4	10,100	581,600
Rooks	2,100	2.0	4,200	241,800
Smith	5,600	1.4	7,600	437,600
Washington	19,600	1.0	18,900	1,088,300
District total	88,700	1.07	94,900	5,464,500
Central District:				
Barton	6,300	1.6	10,200	601,400
Dickinson	18,500	1.0	18,800	1,108,400
Ellis	4,800	1.6	7,800	459,900
Ellsworth	12,200	1.1	13,500	795,900
Lincoln	9,500	1.5	14,000	825,400
McPherson	6,600	1.2	7,900	465,800
Marion	22,700	1.0	21,600	1,273,400
Rice	2,700	1.4	3,800	224,000
Rush	3,200	1.4	4,400	259,400
Russell	9,500	1.5	14,200	837,200
Saline	5,200	1.1	5,900	347,800
District total	101,200	1.21	122,100	7,198,600

ALL OTHER HAY, 1980[1]—*Concluded*

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
South Central District:				
Barber	3,100	1.5	4,700	282,400
Comanche	600	1.0	600	36,000
Edwards	1,300	1.9	2,400	144,200
Harper	6,000	1.9	11,500	690,900
Harvey	4,700	0.8	3,800	228,300
Kingman	9,200	1.4	13,100	787,000
Kiowa	3,500	2.0	7,100	426,500
Pawnee	1,500	1.4	2,100	126,200
Pratt	1,600	1.8	2,800	168,200
Reno	4,900	1.6	7,700	462,600
Sedgwick	11,000	1.3	14,000	840,900
Stafford	1,500	2.1	3,200	192,200
Sumner	8,700	1.2	10,100	606,800
District total	57,600	1.44	83,100	4,992,200
Northeast District:				
Atchison	16,700	1.8	30,300	1,749,800
Brown	17,000	1.9	32,000	1,848,000
Doniphan	4,400	3.0	13,200	762,300
Jackson	36,800	1.5	54,700	3,158,800
Jefferson	28,100	1.8	50,400	2,910,600
Leavenworth	20,400	1.9	39,300	2,269,600
Marshall	22,000	1.1	25,000	1,443,800
Nemaha	18,700	1.6	30,200	1,744,100
Pottawatomie,	31,900	1.0	30,900	1,784,500
Riley	11,000	1.0	11,300	652,600
Wyandotte	1,900	2.4	4,500	259,900
District total	208,900	1.54	321,800	18,584,000
East Central District:				
Anderson	39,100	1.1	42,400	2,519,500
Chase	7,400	1.2	9,000	534,800
Coffey	39,100	0.7	26,600	1,580,600
Douglas	23,300	1.4	33,600	1,996,600
Franklin	30,100	1.6	48,800	2,899,800
Geary	6,000	1.0	5,900	350,600
Johnson	16,500	1.6	26,600	1,580,600
Linn	23,400	1.0	23,700	1,408,300
Lyon	28,700	0.7	21,000	1,247,900
Miami	33,300	1.3	41,900	2,489,800
Morris	27,000	0.6	17,000	1,010,200
Osage	37,600	1.0	38,500	2,287,800
Shawnee	16,300	1.1	17,400	1,034,000
Wabaunsee	22,100	0.9	20,400	1,212,200
District total	349,900	1.07	372,800	22,152,700
Southeast District:				
Allen	21,800	0.6	13,700	824,100
Bourbon	29,100	0.7	21,600	1,299,300
Butler	41,600	0.8	32,800	1,973,200
Chautauqua	14,000	0.7	9,500	571,500
Cherokee	17,800	0.9	16,200	974,500
Cowley	20,500	1.1	22,300	1,341,400
Crawford	17,100	0.9	14,500	872,200
Elk	20,000	0.8	15,000	902,300
Greenwood	24,600	0.7	17,500	1,052,700
Labette	31,000	0.9	28,100	1,690,300
Montgomery	18,500	1.0	19,300	1,161,000
Neosho	22,700	0.9	20,400	1,227,100
Wilson	25,900	0.8	19,500	1,173,000
Woodson	28,000	0.6	17,200	1,034,700
District total	332,600	0.80	267,600	16,097,300
State	1,200,000	1.15	1,380,000	81,157,000

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1. All types except alfalfa.

ALL HAY, 1979

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
Northwest District:				
Cheyenne	8,500	3.5	29,800	1,362,400
Decatur	11,900	4.0	47,300	2,194,200
Graham	10,500	2.9	30,200	1,385,900
Norton	12,200	3.1	38,200	1,760,200
Rawlins	14,000	3.5	48,800	2,278,200
Sheridan	9,700	4.2	40,600	1,895,100
Sherman	7,000	3.9	27,400	1,279,400
Thomas	6,400	3.5	22,200	986,000
District total	80,200	3.55	284,500	13,141,400
West Central District:				
Gove	7,700	3.4	26,200	1,400,100
Greeley	4,000	3.0	11,900	548,300
Lane	5,100	3.1	15,800	793,000
Logan	5,200	2.0	10,200	462,000
Ness	9,000	2.8	24,800	1,156,900
Scott	7,800	3.9	30,100	1,540,400
Trego	8,000	2.8	22,200	1,082,300
Wallace	5,500	3.4	18,700	990,400
Wichita	8,700	4.2	36,500	1,933,600
District total	61,000	3.22	196,400	9,907,000
Southwest District:				
Clark	7,900	2.6	20,600	1,088,300
Finney	36,700	4.6	168,600	9,177,200
Ford	13,000	4.5	58,700	3,147,800
Grant	7,900	4.7	37,000	2,004,900
Gray	17,600	4.6	80,900	4,357,000
Hamilton	8,000	3.6	28,700	1,545,600
Haskell	7,400	5.0	36,900	2,010,500
Hodgeman	6,200	3.7	22,900	1,161,800
Kearny	10,600	4.3	45,300	2,449,300
Meade	14,000	4.3	60,700	3,275,400
Morton	3,200	2.8	9,000	467,000
Seward	10,000	3.8	38,100	2,068,600
Stanton	5,600	4.0	22,300	1,193,400
Stevens	5,200	4.2	21,800	1,182,400
District total	153,300	4.25	651,500	35,129,200
North Central District:				
Clay	22,000	2.5	54,700	2,395,800
Cloud	23,700	2.6	62,100	2,807,000
Jewell	25,600	2.7	68,600	3,077,300
Mitchell	12,100	2.7	32,500	1,443,600
Osborne	19,900	2.4	47,800	2,144,000
Ottawa	21,000	2.7	55,800	2,493,900
Phillips	29,500	2.6	77,700	3,494,300
Republic	21,500	3.1	66,700	3,003,700
Rooks	18,000	2.9	51,800	2,362,700
Smith	24,000	3.1	73,300	3,291,400
Washington	36,000	2.2	80,500	3,546,700
District total	253,300	2.65	671,500	30,060,400
Central District:				
Barton	40,500	3.1	123,600	6,405,900
Dickinson	39,500	2.6	100,600	4,993,200
Ellis	12,100	3.4	40,800	2,029,600
Ellsworth	19,500	1.9	37,800	1,830,200
Lincoln	25,500	3.1	80,000	4,000,000
McPherson	24,700	2.6	65,100	3,261,800
Marion	44,500	2.6	116,000	5,735,800
Rice	16,600	3.0	50,200	2,608,300
Rush	7,600	2.9	22,000	1,[illegible]09,500
Russell	16,400	2.1	34,600	1,672,600
Saline	18,000	2.8	50,400	2,554,400
District total	264,900	2.72	721,100	36,201,300

ALL HAY 1979—*Concluded*

County	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars
South Central District:				
Barber	13,000	2.9	37,000	2,008,500
Comanche	8,900	3.1	27,200	1,517,100
Edwards	19,200	3.3	63,200	3,521,300
Harper	14,000	2.8	39,200	2,093,400
Harvey	14,800	2.3	33,800	1,804,400
Kingman	19,000	2.4	44,700	2,389,100
Kiowa	8,200	3.7	30,200	1,642,900
Pawnee	36,400	3.2	115,500	6,452,200
Pratt	14,500	4.2	60,300	3,365,100
Reno	29,500	3.2	94,200	5,212,100
Sedgwick	32,000	2.9	93,300	5,090,500
Stafford	24,700	3.4	84,000	4,667,600
Sumner	21,000	2.4	50,600	2,715,600
District total	255,200	3.03	773,200	42,479,800
Northeast District:				
Atchison	23,000	2.3	53,200	2,188,500
Brown	20,800	2.7	55,600	2,363,600
Doniphan	7,000	3.0	21,000	906,900
Jackson	53,400	2.0	103,900	4,221,500
Jefferson	31,500	2.1	65,900	2,718,900
Leavenworth	31,000	2.2	68,200	2,863,000
Marshall	38,000	2.4	92,400	4,067,900
Nemaha	32,300	2.2	70,200	3,065,300
Pottawatomie	49,000	2.0	99,800	4,299,500
Riley	19,200	2.8	53,200	2,378,100
Wyandotte	3,500	2.1	7,300	302,400
District total	308,700	2.24	690,700	29,375,600
East Central District:				
Anderson	45,500	2.1	95,500	4,473,400
Chase	19,500	2.5	48,000	2,449,900
Coffey	44,400	1.7	76,300	3,503,000
Douglas	30,500	2.2	66,700	3,160,500
Franklin	34,500	2.1	73,700	3,386,800
Geary	12,000	2.7	32,100	1,651,600
Johnson	18,500	2.2	39,900	1,827,400
Linn	34,200	2.0	68,500	3,100,400
Lyon	48,000	2.0	95,800	4,449,300
Miami	46,000	2.0	90,600	4,102,900
Morris	42,000	2.1	87,600	4,377,600
Osage	43,500	1.7	73,900	3,350,600
Shawnee	25,000	2.4	58,800	2,870,200
Wabaunsee	42,000	2.2	90,800	4,441,800
District total	485,600	2.06	998,200	47,145,400
Southeast District:				
Allen	35,000	2.1	73,800	3,400,300
Bourbon	37,500	1.6	61,500	2,766,600
Butler	63,500	1.9	118,200	5,662,800
Chautauqua	17,300	2.2	38,400	1,870,700
Cherokee	16,800	1.7	27,700	1,209,900
Cowley	32,200	2.5	79,300	3,946,400
Crawford	22,200	2.0	44,300	1,977,000
Elk	24,000	1.9	45,800	2,194,900
Greenwood	40,400	2.2	87,700	4,174,100
Labette	32,000	1.8	56,200	2,471,200
Montgomery	27,500	1.9	51,400	2,375,500
Neosho	23,200	1.9	44,400	1,995,600
Wilson	31,500	2.0	63,900	3,036,900
Woodson	34,700	1.7	60,300	2,718,000
District total	437,800	1.95	852,900	39,799,900
State	2,300,000	2.54	5,840,000	283,240,000

ALL HAY AND PASTURE,* 1980

County	All hay				Pasture (000) acres*
	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars	
Northwest District:					
Cheyenne	8,800	3.3	28,900	1,714,600	251
Decatur	12,600	2.9	35,900	2,142,400	223
Graham	11,200	1.9	20,900	1,243,500	263
Norton	10,500	2.8	29,100	1,724,900	206
Rawlins	12,100	3.5	42,400	2,524,800	262
Sheridan	9,900	2.7	27,100	1,609,500	190
Sherman	7,400	3.6	26,600	1,588,300	178
Thomas	5,700	3.0	17,100	1,007,500	146
District total	78,200	2.92	228,000	13,555,500	1,719
West Central District:					
Gove	7,000	3.0	20,800	1,248,000	291
Greeley	3,600	2.5	9,100	528,200	88
Lane	4,500	2.6	11,500	681,500	152
Logan	3,800	2.3	8,600	494,300	315
Ness	8,700	2.7	23,500	1,378,800	258
Scott	6,500	3.1	20,200	1,200,300	117
Trego	7,400	2.2	16,300	966,700	224
Wallace	4,600	3.8	17,400	1,045,100	245
Wichita	7,100	3.7	26,400	1,586,100	101
District total	53,200	2.89	153,800	9,129,000	1,791
Southwest District:					
Clark	9,100	2.9	26,100	1,591,000	402
Finney	33,000	4.5	148,800	9,161,400	173
Ford	14,000	4.2	58,300	3,564,900	199
Grant	7,600	3.7	28,400	1,743,200	74
Gray	20,800	4.7	98,300	6,033,600	79
Hamilton	9,400	4.0	37,200	2,278,200	170
Haskell	8,000	5.0	39,600	2,437,400	52
Hodgeman	5,900	2.9	17,200	1,027,400	202
Kearny	10,500	3.7	38,700	2,374,500	157
Meade	13,500	3.4	45,800	2,798,500	248
Morton	3,300	2.4	7,900	480,700	157
Seward	11,700	4.6	53,400	3,287,000	91
Stanton	6,200	3.6	22,500	1,382,700	88
Stevens	6,000	4.4	26,300	1,616,200	87
District total	159,000	4.08	648,500	39,776,700	2,179
North Central District:					
Clay	20,600	1.2	24,100	1,447,500	124
Cloud	23,700	2.0	47,900	2,921,500	138
Jewell	19,500	2.3	45,500	2,756,100	204
Mitchell	10,300	1.7	17,600	1,070,800	139
Osborne	19,300	2.4	46,700	2,834,600	243
Ottawa	21,400	1.7	35,900	2,174,600	186
Phillips	30,500	2.1	65,100	3,966,100	290
Republic	22,300	2.5	56,300	3,421,100	137
Rooks	15,700	2.7	42,100	2,571,100	239
Smith	22,000	2.3	51,300	3,123,400	233
Washington	36,300	1.5	53,300	3,202,500	196
District total	241,600	2.01	485,800	29,489,300	2,129
Central District:					
Barton	40,400	2.4	96,500	5,940,400	124
Dickinson	36,500	1.6	57,500	3,502,600	171
Ellis	12,500	2.4	30,000	1,833,300	215
Ellsworth	19,900	1.4	27,300	1,649,700	184
Lincoln	24,200	2.3	54,600	3,337,200	207
McPherson	24,600	2.3	56,100	3,447,700	136
Marion	44,500	1.3	56,500	3,432,500	197
Rice	18,500	2.1	38,700	2,383,100	120
Rush	8,200	2.7	22,400	1,373,000	110
Russell	17,600	1.7	30,000	1,814,700	219
Saline	16,000	2.2	34,400	2,111,000	155
District total	262,900	1.92	504,000	30,825,200	1,838

ALL HAY AND PASTURE,* 1980—*Concluded*

County	All hay				Pasture (000) acres°
	Acres harvested	Yield per acre, tons	Production, tons	Farm value, dollars	
South Central District:					
Barber	11,200	2.4	27,000	1,654,300	459
Comanche	7,900	2.8	21,700	1,334,100	320
Edwards	22,900	3.9	88,200	5,422,600	95
Harper	12,600	2.9	36,000	2,198,100	189
Harvey	12,300	1.9	23,500	1,440,200	57
Kingman	19,500	2.0	39,100	2,386,500	193
Kiowa	7,600	2.3	17,700	1,078,600	212
Pawnee	39,100	3.8	148,900	9,157,300	85
Pratt	15,800	2.8	44,500	2,733,600	110
Reno	28,100	3.0	84,100	5,162,700	184
Sedgwick	35,200	2.1	72,300	4,427,500	113
Stafford	25,400	3.1	78,000	4,793,900	115
Sumner	24,300	1.6	39,800	2,433,900	143
District total	261,900	2.75	720,800	44,223,300	2,275
Northeast District:					
Atchison	21,200	2.0	42,200	2,462,800	70
Brown	23,300	2.1	49,900	2,920,500	70
Doniphan	8,000	3.3	26,100	1,535,200	38
Jackson	43,200	1.6	68,400	3,979,700	178
Jefferson	34,700	2.0	68,100	3,971,100	102
Leavenworth	29,000	2.0	58,600	3,426,000	69
Marshall	39,700	1.5	60,300	3,559,000	185
Nemaha	35,700	1.8	63,900	3,763,300	138
Pottawatomie	44,000	1.4	62,400	3,671,900	260
Riley	22,000	1.8	38,600	2,288,300	136
Wyandotte	2,700	2.5	6,800	397,700	9
District total	303,500	1.80	545,300	31,975,500	1,255
East Central District:					
Anderson	45,100	1.2	54,300	3,251,900	160
Chase	15,000	1.6	24,200	1,470,400	324
Coffey	44,500	0.7	32,000	1,913,000	159
Douglas	27,500	1.6	44,000	2,636,700	81
Franklin	33,900	1.7	56,400	3,367,600	112
Geary	12,200	1.7	20,300	1,236,900	90
Johnson	18,600	1.7	31,100	1,857,600	64
Linn	25,700	1.0	26,600	1,586,800	119
Lyon	34,600	0.9	31,400	1,888,000	256
Miami	37,100	1.3	48,800	2,914,500	116
Morris	42,200	1.0	43,000	2,610,500	252
Osage	40,600	1.1	44,600	2,663,300	154
Shawnee	21,000	1.6	33,900	2,049,600	77
Wabaunsee	34,700	1.4	47,100	2,855,400	258
District total	432,700	1.24	537,700	32,302,200	2,222
Southeast District:					
Allen	26,200	0.8	19,700	1,194,100	122
Bourbon	31,700	0.8	26,500	1,601,500	184
Butler	55,800	1.0	56,600	3,440,900	438
Chautauqua	19,100	1.1	20,400	1,243,700	265
Cherokee	18,100	0.9	16,800	1,011,500	74
Cowley	34,700	1.7	58,200	3,555,300	419
Crawford	18,500	0.9	16,000	964,700	125
Elk	25,800	1.0	25,600	1,556,000	278
Greenwood	33,000	1.0	33,100	2,014,700	523
Labette	32,000	0.9	30,000	1,807,500	161
Montgomery	22,000	1.2	26,600	1,611,200	152
Neosho	24,600	1.0	24,200	1,461,400	142
Wilson	34,200	0.9	31,400	1,906,800	147
Woodson	31,300	0.7	21,000	1,269,000	192
District total	407,000	1.00	406,100	24,638,300	3,222
State	2,200,000	1.92	4,230,000	255,915,000	18,630

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* Based on 1978 U.S. Census of Agriculture.

ALFALFA SEED, 1978

County	Acres * harvested	Yield per acre, pounds	Production, pounds	Farm value, dollars
Northwest District:				
Cheyenne	110	137	15,100	12,300
Decatur	140	137	19,200	15,700
Graham	60	137	8,200	6,700
Norton	1,160	137	158,500	129,200
Rawlins	70	137	9,600	7,800
Sheridan	50	137	6,900	5,600
Sherman	•	•	•	•
Thomas	•	•	•	•
District total	1,620	137	221,600	180,600
West Central District:				
Gove				
Greeley				
Lane				
Logan				
Ness	110	138	15,200	12,400
Scott				
Trego				
Wallace				
Wichita	350	138	48,300	39,400
District total	460	138	63,500	51,800
Southwest District:				
Clark				
Finney				
Ford	•	•	•	•
Grant				
Gray	420	130	54,800	44,700
Hamilton	60	130	7,800	6,300
Haskell				
Hodgeman				
Kearny				
Meade	130	130	16,900	13,800
Morton	•	•	•	•
Seward	90	130	11,700	9,500
Stanton				
Stevens				
District total	750	130	97,700	79,600
North Central District:				
Clay	350	98	34,300	28,000
Cloud	270	98	26,500	21,600
Jewell	5,490	98	535,800	436,700
Mitchell	310	98	30,400	24,800
Osborne	1,740	98	170,000	138,500
Ottawa	130	98	12,700	10,300
Phillips	640	98	62,700	51,100
Republic	630	98	61,700	50,300
Rooks	110	98	10,800	8,800
Smith	1,380	98	134,700	109,800
Washington	550	98	53,900	43,900
District total	11,600	98	1,133,500	923,800
Central District:				
Barton	2,200	120	264,000	215,200
Dickinson	1,490	120	178,800	145,700
Ellis	•	•	•	•
Ellsworth	620	120	74,400	60,600
Lincoln	760	120	91,200	74,300
McPherson	2,360	120	282,300	230,100
Marion	2,710	120	324,200	264,200
Rice	1,340	120	160,800	131,000
Rush	230	120	27,600	22,500
Russell	370	120	44,400	36,200
Saline	2,140	120	256,800	209,300
District total	14,240	120	1,706,900	1,391,100

ALFALFA SEED, 1978—*Concluded*

County	Acres * harvested	Yield per acre, pounds	Production, pounds	Farm value, dollars
South Central District:				
Barber	1,020	132	134,100	109,300
Comanche	920	132	121,400	99,000
Edwards	1,770	132	232,600	189,600
Harper	870	132	114,800	93,600
Harvey	1,090	132	143,300	116,800
Kingman	700	132	92,400	75,300
Kiowa	...	...	...	...
Pawnee	2,090	132	274,900	224,100
Pratt	600	132	79,200	64,600
Reno	3,810	132	500,900	408,400
Sedgwick	950	132	125,400	102,200
Stafford	3,380	132	444,200	362,100
Sumner	600	132	79,200	64,600
District total	17,800	132	2,342,400	1,909,600
Northeast District:				
Atchison	200	103	20,600	16,800
Brown	110	103	11,300	9,200
Doniphan	*	*	*	*
Jackson	130	103	13,400	10,900
Jefferson	150	103	15,400	12,600
Leavenworth	1,780	103	183,300	149,400
Marshall	360	103	37,100	30,200
Nemaha	*	*	*	*
Pottawatomie	220	103	22,600	18,400
Riley	500	103	51,500	42,000
Wyandotte	...	...	...	...
District total	3,500	103	360,300	293,600
East Central District:				
Anderson	270	124	33,500	27,300
Chase	560	124	69,300	56,500
Coffey	140	124	17,300	14,100
Douglas	*	*	*	*
Franklin	100	124	12,400	10,100
Geary	360	124	44,600	36,400
Johnson	*	*	*	*
Linn	*	*	*	*
Lyon	140	124	17,300	14,100
Miami	*	*	*	*
Morris	830	124	102,600	83,600
Osage	*	*	*	*
Shawnee	50	124	6,200	5,100
Wabaunsee	130	124	16,100	13,100
District total	2,700	124	334,200	272,400
Southeast District:				
Allen	*	*	*	*
Bourbon	120	87	10,400	8,500
Butler	3,310	87	289,500	235,900
Chautauqua	170	87	14,800	12,100
Cherokee	50	87	4,400	3,600
Cowley	1,150	87	100,600	82,000
Crawford	170	87	14,800	12,100
Elk	690	87	60,000	48,900
Greenwood	290	87	25,200	20,500
Labette	70	87	6,100	5,000
Montgomery	230	87	20,000	16,300
Neosho	*	*	*	*
Wilson	90	87	7,800	6,400
Woodson	940	87	81,900	66,700
District total	7,330	87	639,900	521,500
State	60,000	115	6,900,000	5,624,000

* Counties with harvested acreage of less than 50 acres not shown separately, but included in district and state totals.

ALFALFA SEED, 1979

County	Acres * harvested	Yield per acre, pounds	Production, pounds	Farm value, dollars
Northwest District:				
Cheyenne				
Decatur				
Graham	290	95	27,600	22,500
Norton	170	95	16,100	13,000
Rawlins	270	95	25,600	20,700
Sheridan	*	*	*	*
Sherman	210	95	20,000	16,200
Thomas	*	*	*	*
District total	1,000	95	95,000	77,000
West Central District:				
Gove				
Greeley				
Lane				
Logan				
Ness	140	110	15,400	12,500
Scott				
Trego	*	*	*	*
Wallace				
Wichita				
District total	150	110	16,500	13,400
Southwest District:				
Clark	630	95	60,000	48,700
Finney	200	95	19,100	15,500
Ford	70	95	6,700	5,400
Grant	*	*	*	*
Gray				
Hamilton	*	*	*	*
Haskell				
Hodgeman	*	*	*	*
Kearny				
Meade	70	95	6,600	5,300
Morton				
Seward				
Stanton				
Stevens				
District total	1,050	95	100,000	81,000
North Central District:				
Clay	330	90	29,700	24,100
Cloud	50	90	4,500	3,600
Jewell	460	90	41,400	33,500
Mitchell	310	90	27,900	22,600
Osborne	1,950	90	175,500	142,200
Ottawa	2,400	90	216,000	175,000
Phillips	380	90	34,200	27,700
Republic	870	90	78,300	63,400
Rooks	360	90	32,400	26,200
Smith	1,330	90	119,700	97,000
Washington	360	90	32,400	26,200
District total	8,800	90	792,000	641,500
Central District:				
Barton	1,520	95	144,400	117,000
Dickinson	920	95	87,400	70,800
Ellis	*	*	*	*
Ellsworth	320	95	30,400	24,600
Lincoln	390	95	37,000	30,000
McPherson	3,170	95	301,200	243,900
Marion	900	95	85,500	69,300
Rice	1,590	95	151,100	122,400
Rush	*	*	*	*
Russell	280	95	26,600	21,500
Saline	1,460	95	138,700	112,400
District total	10,600	95	1,007,000	815,700

ALFALFA SEED, 1979—*Concluded*

County	Acres ° harvested	Yield per acre, pounds	Production, pounds	Farm value, dollars
South Central District:				
Barber	1,000	95	95,000	77,000
Comanche	730	95	69,300	56,100
Edwards	550	95	52,300	42,400
Harper	450	95	42,700	34,600
Harvey	400	95	38,000	30,800
Kingman	510	95	48,500	39,300
Kiowa	320	95	30,400	24,600
Pawnee	570	95	54,100	43,800
Pratt	470	95	44,700	36,200
Reno	4,180	95	397,100	321,700
Sedgwick	1,840	95	174,800	141,600
Stafford	3,140	95	298,300	241,600
Sumner	740	95	70,300	56,900
District total	14,900	95	1,415,500	1,146,600
Northeast District:				
Atchison	°	°	°	°
Brown	270	110	29,700	24,100
Doniphan	°	°	°	°
Jackson				
Jefferson	°	°	°	°
Leavenworth	90	110	9,900	8,000
Marshall	260	110	28,600	23,200
Nemaha				
Pottawatomie	90	110	9,900	8,000
Riley	340	110	37,400	30,200
Wyandotte				
District total	1,100	110	121,000	98,000
East Central District:				
Anderson	150	110	16,500	13,400
Chase	250	110	27,500	22,300
Coffey	180	110	19,800	16,000
Douglas	°	°	°	°
Franklin	540	110	59,400	48,100
Geary	250	110	27,500	22,300
Johnson	190	110	20,900	16,900
Linn				
Lyon	130	110	14,300	11,600
Miami	150	110	16,500	13,400
Morris	200	110	22,000	17,800
Osage	°	°	°	°
Shawnee	60	110	6,600	5,300
Wabaunsee	450	110	49,500	40,100
District total	2,600	110	286,000	231,700
Southeast District:				
Allen	°	°	°	°
Bourbon	100	90	9,000	7,300
Butler	820	90	73,800	59,700
Chautauqua	90	90	8,100	6,600
Cherokee	110	90	9,900	8,000
Cowley	760	90	68,400	55,300
Crawford	55	90	4,900	4,000
Elk				
Greenwood	110	90	9,900	8,000
Labette	200	90	18,000	14,600
Montgomery	90	90	8,100	6,600
Neosho	130	90	11,700	9,500
Wilson	200	90	18,000	14,600
Woodson	110	90	9,900	8,000
District total	2,800	90	252,000	204,100
State	43,000	95	4,085,000	3,309,000

° Counties with harvested acreage of less than 50 acres not shown separately, but included in district and state totals.

RED CLOVER SEED, 1978

County	Acres * harvested	Yield per acre, pounds	Production, pounds	Farm value, dollars
North Central District:				
Cloud	*	*	*	*
Jewell	*	*	*	*
Osborne	140	90	9,000	6,800
Phillips	*	*	*	*
Republic	50		3,600	2,500
Smith	*	*	*	*
District total	290	90	21,600	14,100
Central District:				
Dickinson	80	90	5,400	3,900
Lincoln	100	90	7,200	4,900
McPherson	110	90	8,100	5,400
Rice	50	90	3,600	2,400
Saline	*	*	*	*
District total	360	90	26,100	17,600
South Central District:				
Barber	*	*	*	*
Harper	*	*	*	*
Harvey	*	*	*	*
Kingman	*	*	*	*
Sedgwick	90	90	7,200	4,300
Sumner	50	90	3,600	2,400
District total	280	90	20,700	13,700
Northeast District:				
Atchison	680	80	44,800	29,200
Brown	380	80	23,200	16,400
Doniphan	110	80	7,200	4,700
Jackson	260	80	16,800	11,200
Jefferson	380	80	24,800	16,400
Leavenworth	650	80	44,000	27,800
Marshall	130	80	7,200	5,600
Nemaha	160	80	7,200	6,900
Wyandotte	*	*	*	*
District total	2,760	80	176,000	118,600
East Central District:				
Anderson	1,120	90	83,400	54,400
Coffey	680	90	50,200	33,100
Douglas	500	90	36,800	24,300
Franklin	650	90	48,400	31,700
Johnson	280	90	20,600	13,600
Linn	450	90	31,400	21,900
Lyon	50	90	2,700	2,400
Miami	600	90	43,900	29,200
Osage	550	90	39,400	26,800
Shawnee	100	90	7,200	4,900
District total	4,980	90	364,000	242,300
Southeast District:				
Allen	1,280	100	79,500	69,400
Bourbon	650	100	53,700	35,300
Butler	110	100	9,900	6,000
Cherokee	50	100	4,000	2,700
Crawford	280	100	23,900	15,200
Labette	500	100	37,800	27,100
Montgomery	*	*	*	*
Neosho	390	100	31,800	21,200
Woodson	*	*	*	*
District total	3,300	100	246,600	180,700
State	12,000	90	855,000	587,000

* Counties with harvested acreage of less than 50 acres not shown separately, but included in district and state totals.

RED CLOVER SEED, 1979

County	Acres * harvested	Yield per acre, pounds	Production, pounds	Farm value, dollars
North Central District:				
Cloud	130	80	10,400	5,500
Osborne	°	°	°	°
Smith	°	°	°	°
District total	160	80	12,800	6,700
Central District:				
Dickinson	°	°	°	°
Rush	°	°	°	°
Russell	°	°	°	°
District total	80	80	6,400	3,300
South Central District:				
Harvey	°	°	°	°
Kingman	°	°	°	°
Reno	°	°	°	°
Sedgwick	80	80	6,400	3,400
Stafford	°	°	°	°
Sumner	°	°	°	°
District total	170	80	13,600	7,100
Northeast District:				
Atchison	840	75	63,000	32,800
Brown	450	75	33,700	17,600
Doniphan	130	75	9,800	5,100
Jackson	80	75	6,000	3,100
Jefferson	230	75	17,200	9,000
Leavenworth	110	75	8,300	4,300
Marshall	170	75	12,700	6,600
Pottawatomie	°	°	°	°
Riley	°	°	°	°
District total	2,060	75	154,500	80,500
East Central District:				
Anderson	500	85	42,500	22,000
Coffey	400	85	34,000	17,700
Douglas	150	85	12,800	6,700
Franklin	140	85	11,900	6,200
Johnson	°	°	°	°
Linn	180	85	15,300	8,000
Lyon	°	°	°	°
Miami	240	85	20,400	10,600
Morris	50	85	4,200	2,200
Osage	330	85	28,000	14,600
District total	2,060	85	175,100	91,100
Southeast District:				
Allen	230	80	18,400	9,600
Bourbon	300	80	24,000	12,400
Cherokee	150	80	12,000	6,300
Cowley	°	°	°	°
Crawford	220	80	17,600	9,200
Labette	230	80	18,400	9,600
Montgomery	°	°	°	°
Neosho	280	80	22,400	11,600
District total	1,470	80	117,600	61,300
State	6,000	80	480,000	250,000

* Counties with harvested acreage of less than 50 acres not shown separately, but included in district and state totals.

LESPEDEZA AND TALL FESCUE SEED, 1978

County	Lespedeza Seed *			Tall Fescue Seed *		
	Acres harvested	Production, pounds	Farm value, dollars	Acres harvested	Production, pounds	Farm value, dollars
West Central District						
Logan				430	86,000	11,200
District total				430	86,000	11,200
Southwest District						
District total				120	24,000	3,100
North Central District						
District total	20	4,700	1,400	120	24,000	3,100
Central Dristrict						
District total	30	7,100	2,100	10	2,000	300
South Central District						
District total	250	58,800	17,300	750	150,000	19,500
East Central District						
Anderson				680	136,000	17,700
Linn				4,760	952,000	123,800
Miami				700	140,000	18,200
Shawnee				570	114,000	14,800
District total	350	82,300	24,300	7,090	1,418,000	184,300
Southeast District						
Allen				2,230	446,000	58,000
Bourbon				2,990	598,000	77,800
Butler				600	120,000	15,600
Chautauqua	330	77,500	22,900			
Cherokee	390	91,600	27,000	1,670	334,000	43,400
Crawford	3,470	815,400	240,500	7,450	1,490,000	193,700
Labette	1,450	340,700	100,500	5,030	1,006,000	130,800
Montgomery				1,640	328,000	42,700
Neosho	2,330	547,500	161,500	5,600	1,120,000	145,600
Woodson				390	78,000	10,100
District total	8,330	1,957,400	577,500	28,480	5,696,000	740,500
State	9,000	2,115,000	624,000	37,000	7,400,000	962,000

LESPEDEZA AND TALL FESCUE SEED, 1979

County	Lespedeza Seed *			Tall Fescue Seed *		
	Acres harvested	Production, pounds	Farm value, dollars	Acres harvested	Production, pounds	Farm value, dollars
West Central District						
District total				250	56,300	10,100
North Central District						
District total				150	33,800	6,100
Central District						
District total	40	9,200	1,900			
South Central District						
District total				300	67,500	12,200
Northeast District						
District total	100	23,000	4,700	250	56,200	10,100
East Central District						
Anderson				1,000	225,000	40,500
Linn				3,600	810,000	145,800
Miami				400	90,000	16,200
District total	110	25,300	5,200	5,650	1,271,200	228,900
Southeast District						
Allen				800	180,000	32,400
Bourbon				2,550	573,700	103,300
Cherokee	400	92,000	18,900	1,200	270,000	48,600
Cowley				1,250	281,300	50,600
Crawford	4,300	989,000	203,000	5,100	1,147,500	206,600
Labette	2,340	538,200	110,400	5,400	1,215,000	218,800
Montgomery				1,450	326,300	58,700
Neosho	2,330	535,900	110,000	1,650	371,200	66,800
Woodson				600	135,000	24,300
District total	9,750	2,242,500	460,200	20,400	4,590,000	826,600
State	10,000	2,300,000	472,000	27,000	6,075,000	1,094,000

* Counties with harvested acreage of less than 300 acres not shown separately, but included in district and state totals.

BARLEY

	1979					1980				
District	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
Northwest District: District Total	2,800	2,210	39.6	87,600	186,500	2,900	1,900	43.1	81,800	175,100
West Central Dist.: District Total	5,700	4,680	37.8	176,700	376,400	6,000	5,100	43.4	221,300	473,800
Southwest District: District Total	6,100	4,390	45.1	198,100	421,900	16,800	15,000	34.2	513,000	1,098,400
North Central Dist.: District Total	4,900	3,350	39.6	132,500	282,200	3,600	3,200	42.1	134,700	288,400
Central District: District Total	9,000	7,010	44.4	311,400	663,200	6,800	6,100	40.8	248,900	612,900
South Central Dist.: District Total	19,800	16,260	47.0	764,500	1,628,300	18,800	14,900	43.0	640,200	1,610,600
Northeast District: District Total	3,900	3,000	39.8	119,400	254,300	3,100	2,700	44.3	119,700	294,700
East Central Dist.: District Total	3,400	2,560	46.2	118,200	251,700	2,500	2,300	45.2	103,900	255,800
Southeast District: District Total	10,400	8,540	44.4	379,600	808,500	8,500	7,800	45.6	355,500	875,300
State	66,000	52,000	44.0	2,288,000	4,873,000	69,000	59,000	41.0	2,419,000	5,685,000

RYE

	1979					1980				
District	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars	Acres planted	Acres harvested	Yield per acre, bushels	Production, bushels	Farm value, dollars
Northwest District: District Total	7,200	1,400	26.1	36,500	69,400	4,400	800	20.8	16,600	40,000
West Central Dist.: District Total	5,300	800	23.9	19,100	36,300	3,200	600	20.8	12,500	29,900
Southwest District: District Total	14,100	2,100	30.7	64,400	122,500	9,600	1,200	21.9	26,300	63,300
North Central Dist.: District Total	6,100	1,100	26.1	28,700	54,500	3,700	700	20.0	14,000	33,800
Central District: District Total	16,100	3,200	26.8	85,900	163,300	10,600	1,700	21.9	37,300	89,400
South Central Dist.: District Total	24,200	5,800	26.8	155,700	295,900	20,900	3,400	17.7	60,200	144,600
Northeast District: District Total	4,700	700	33.6	23,500	44,700	2,800	300	25.3	7,600	18,200
East Central Dist.: District Total	3,000	1,100	37.6	41,400	78,700	2,200	400	26.5	10,600	25,200
Southeast District: District Total	4,300	1,800	27.1	48,800	92,700	2,600	900	27.7	24,900	59,600
State	85,000	18,000	28.0	504,000	958,000	60,000	10,000	21.0	210,000	504,000

SUGAR BEETS, DRY BEANS AND POPCORN, 1979

County	Sugar Beets			Dry Beans			Popcorn		
	Acres harvested	Yield per acre, tons	Production, tons	Acres harvested	Yield per acre, cwt.	Production, cwt.	Acres harvested	Yield per acre, pounds	Production, pounds
Northwest District									
Cheyenne	1,600	19.3	30,900	3,000	11.9	35,700			
Rawlins				500	11.0	5,500			
Sheridan	1,100	21.5	23,650	200	10.0	2,000			
Sherman	8,500	16.6	140,950	10,300	9.8	101,200			
Thomas				200	10.0	2,000	250	3,000	750,000
District Total	11,200	17.5	195,500	14,200	10.3	146,400	250	3,000	750,000
West Central District									
Gove				100	24.0	2,400			
Wallace	800	21.9	17,500	200	9.0	1,800			
Wichita				1,500	8.0	12,000	490	3,380	1,656,200
District Total	800	21.9	17,500	1,800	9.0	16,200	490	3,380	1,656,200
Southwest District									
Finney							120	3,250	390,000
Grant							550	3,800	2,090,000
Gray							60	3,190	191,400
Hamilton				200	5.0	1,000			
Haskell				100	8.0	800	120	3,110	373,200
Meade							680	3,330	2,261,800
Seward				100	8.0	800	240	2,800	672,000
Stanton				600	8.0	4,800	520	3,250	1,690,000
District Total				1,000	7.4	7,400	2,290	3,350	7,668,400
Northeast District									
Doniphan							120	3,470	416,400
Jefferson							560	3,210	1,797,600
District Total							680	3,260	2,214,000
East Central District									
Douglas							190	3,060	581,400
District Total							190	3.060	581,400
State	12,000	17.8	213,000	17,000	10.0	170,000	3,900	3,300	12,870,000

SUGAR BEETS, DRY BEANS AND POPCORN, 1980

County	Sugar Beets			Dry Beans			Popcorn		
	Acres harvested	Yield per acre, tons	Production, tons	Acres harvested	Yield per acre, cwt.	Production, cwt.	Acres harvested	Yield per acre, pounds	Production, pounds
Northwest District:									
Cheyenne	2,050	17.4	35,750	3,400	14.5	49,300			
Sheridan	1,100	16.4	18,050	1,700	14.0	23,900			
Sherman	10,000	12.7	127,000	9,600	14.8	142,100			
Thomas				1,700	10.4	17,700	150	2,020	303,000
District Total	13,150	13.8	180,800	16,400	14.2	233,000	150	2,020	303,000
West Central District:									
Wallace	1,350	14.2	19,200	1,500	14.0	21,000			
Wichita				3,400	13.0	44,200	250	2,150	537,500
District Total	1,350	14.2	19,200	4,900	13.3	65,200	250	2,150	537,500
Southwest District:									
Finney							150	2,150	322,500
Grant				600	14.0	8,400	2,000	2,210	4,423,000
Gray							30	2,000	60,000
Hamilton				1,100	14.0	15,400			
Haskell				600	14.0	8,400	100	1,100	110,000
Meade							590	2,600	1,534,000
Seward				200	14.0	2,800	80	2,000	160,000
Stanton				200	14.0	2,800	200	2,700	540,000
District Total				2,700	14.0	37,800	3,150	2,270	7,149,500
Northeast District									
Doniphan							50	1,600	80,000
Jefferson							500	780	390,000
District Total							550	850	470,000
East Central District									
Douglas							100	530	530,000
District Tctal							100	530	530,000
State	14,500	13.8	200,000	24,000	14.0	336,000	4,200	2,140	8,990,000

COMMERCIAL APPLES AND PEACHES, 1979

County	Apples[1]		Peaches[1]	
	Production, pounds	Farm value, dollars	Production, pounds	Farm value, dollars
Northwest District:				
District total	48,500	4,600	10,800	2,700
West Central District:				
District total	34,700	3,300	14,900	3,700
Southwest District:				
District total	29,100	2,800	21,700	4,600
North Central District:				
Clay	137,700	12,590		
Cloud	71,800	6,560		
Osborne	270,100	24,690		
Republic	305,500	27,920		
District total	928,800	84,900	116,100	29,000
Central District:				
McPherson	517,000	39,280		
Marion	55,500	4,220		
Rice	282,900	21,500	83,400	22,400
Rush	89,000	6,760	90,800	24,300
Saline	139,400	10,590	45,900	12,300
District total	1,188,400	90,300	282,500	75,600
South Central District:				
Harvey	68,700	7,390		
Kingman	74,500	8,010	46,400	11,100
Reno	381,400	41,030	202,900	48,600
Sedgwick	1,672,500	179,920	1,999,100	479,700
Stafford	114,200	12,280	90,400	21,600
Sumner	829,400	89,220	657,600	157,800
District total	3,248,000	349,400	3,118,700	748,000
Northeast District:				
Atchison	414,500	36,150		
Doniphan	4,007,500	349,460	49,200	13,800
Jackson	67,300	5,870		
Jefferson	563,800	49,160	83,000	23,200
Leavenworth	199,000	17,350	126,400	35,300
Marshall	40,400	3,520		
Pottawatomie	47,200	4,120		
Riley	295,300	25,750		
Wyandotte	373,100	32,540	287,100	80,100
District total	6,068,700	529,200	639,400	178,700
East Central District:				
Chase	147,700	12,080		
Douglas	104,100	8,520	232,000	63,800
Franklin	71,800	5,870		
Johnson	286,300	23,420		
Linn	165,300	13,520	97,400	26,800
Lyon	43,600	3,570		
Miami	505,800	41,380		
Shawnee	62,200	5,090		
Wabaunsee	53,600	4,390		
District total	1,597,500	130,700	457,200	125,700
Southeast District:				
Allen	46,800	3,650		
Bourbon	104,000	8,110		
Butler	57,200	4,460		
Cherokee	47,300	3,690	56,100	13,600
Cowley	82,100	6,400	95,700	23,200
Crawford	63,600	4,960		
Elk	52,000	4,060		
Labette	124,800	9,730		
Montgomery	666,000	51,950	70,400	17,000
Neosho	175,700	13,700		
Wilson	89,500	6,980		
Woodson	294,700	23,060		
District total	1,856,300	144,800	338,700	82,000
State	15,000,000	1,340,000	5,000,000	1,250,000

1. Counties producing less than 40,000 lbs. are not shown separately, but are included in district totals.

COMMERCIAL APPLES AND PEACHES, 1980

County	Apples[1]		Peaches[1]	
	Production, pounds	Farm value, dollars	Production, pounds	Farm value, dollars
Northwest District:				
District total	35,100	3,400	13,200	2,600
West Central District:				
District total	23,000	2,200	20,600	4,500
Southwest District:				
District total	28,500	2,800	49,300	8,000
North Central District:				
Clay	71,200	5,510		
Cloud	41,100	3,180		
Osborne	124,600	9,650		
Republic	164,300	12,720		
District total	476,700	36,900	76,000	15,000
Central District:				
McPherson	513,400	55,900	40,600	8,280
Marion	89,800	9,780		
Rice	616,000	67,070	73,800	15,050
Rush	197,200	21,470	153,400	31,280
Saline	[illegible],100	22,010	74,000	15,090
District total	1,753,200	190,900	416,800	85,000
South Central District:				
Harvey	80,500	8,610		
Kingman	42,400	4,540	44,600	9,050
Pawnee	55,600	5,950		
Reno	355,000	37,990	158,600	32,170
Sedgwick	591,500	63,290	3,200,200	649,200
Stafford	65,700	7,030	43,100	8,740
Sumner	492,900	52,740	503,400	102,120
District total	1,728,800	185,000	4,031,800	817,900
Northeast District:				
Atchison	513,400	42,130		
Doniphan	3,655,100	299,970	144,600	30,040
Jackson	46,000	3,780		
Jefferson	176,600	14,490	80,500	[illegible],720
Leavenworth	120,500	9,890	164,700	34,220
Marshall	46,000	3,780		
Riley	192,500	15,800		
Wyandotte	82,200	6,750	343,700	71,400
District total	4,882,400	400,700	847,200	176,000
East Central District:				
Chase	71,900	5,170		
Douglas	78,000	5,610	209,100	39,110
Franklin	82,200	5,910		
Johnson	283,700	20,400	71,800	13,430
Linn	57,500	4,130	218,200	40,820
Lyon	51,300	3,690		
Miami	143,800	10,340	66,000	12,350
Morris			57,300	10,720
District total	926,100	66,600	719,500	134,600
Southeast District:				
Bourbon	42,100	3,690		
Cherokee	94,900	8,320	52,100	9,030
Cowley			131,200	22,730
Crawford	47,600	4,170		
Labette	113,900	9,990		
Montgomery	340,100	29,820	46,600	8,070
Neosho	131,400	11,520		
Wilson	90,400	7,930		
Woodson	135,000	11,840		
District total	1,146,200	100,500	325,600	56,400
State	11,000,000	989,000	6,500,000	1,300,000

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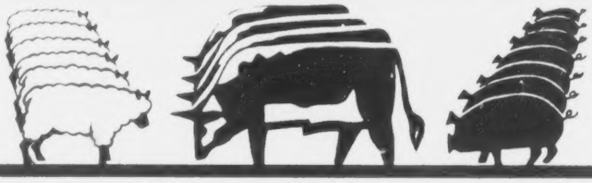
[1] Counties producing less than 40,000 lbs. are not shown separately, but are included in district totals.

CATTLE HOGS AND SHEEP



BY CHARLES L. RUCKMAN, G. ERIC WALDHAUS & HERBERT L. VANDERBERRY

CATTLE INVENTORY UP

The January 1, 1981 inventory of all cattle and calves on Kansas farms numbered 6.45 million head, up 4 percent from the previous year. Beef cows were up 11 percent at 1,897,000 head, while milk cows increased 3 percent to 123,000 head, resulting in total cow numbers of 2.02 million head. The 1980 calf crop was placed at 1.85 million head, up 10 percent from 1979. The average value per head for all cattle and calves, at $405 on January 1, 1981, was off 11 percent from the previous year. In 1980 the number of operations with cattle was estimated at 50,000, off 2,000 from 1979. Cattle on full feed for the slaughter market stood at 1,100,000 head on January 1, 1981, 13 percent less than the Kansas feedlot inventory of January 1, 1980.

HOG AND PIG NUMBERS FALL

The Kansas inventory of all hogs and pigs totaled 1,900,000 head on December 1, 1980, down 9 percent from the previous year. Breeding hogs numbered 265,000 head, 4 percent below a year earlier, while market hogs totaled 1,635,000, off 10 percent from the 1979 level. Total value of the hog and pig inventory was $123,500,000, up 16 percent from the December 1, 1979 value. The higher value was due to a significant increase in value per head to $65.00, compared with $51.00 the previous year. The pig crop for the December-May period of 1980 totaled 1,646,000 head, up 3 percent, while the June-November crop, at 1,426,000 head, was down 13 percent. The number of operations with hogs, at 14,000, decreased 1,000 from a year earlier.

SHEEP AND LAMB NUMBERS OFF

Sheep and lambs on Kansas farms totaled 200,000 head on January 1, 1981. Sheep and lambs on feed, at 60,000 head, were off 25 percent, while stock sheep numbers fell 10 percent to 140,000 head. This was the first decline following four years of increasing flocks. Lambs saved during 1980 totaled 145,000 head, 8 percent more than 1979. The number of places with sheep held constant at 2,200. The inventory of sheep and lambs was valued at $12.5 million on January 1, 1981, off 24 percent from January 1, 1980. Shorn wool production during 1980 totaled 1.7 million pounds, 5 percent less than 1979. The value of wool production was set at $1,308,000, off 6 percent from 1979.

RED MEAT PRODUCTION INCREASES

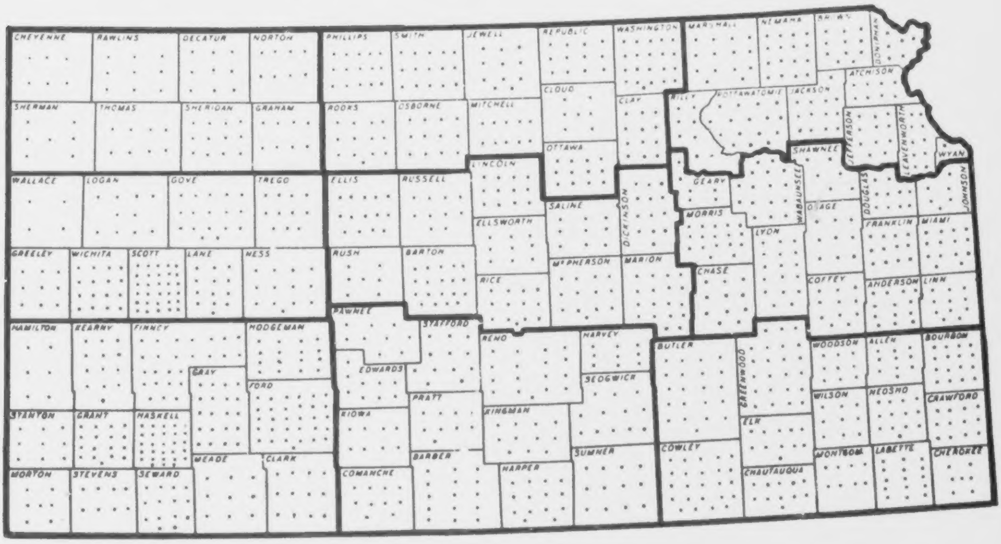
Kansas commercial red meat production during 1980 totaled 2.3 billion pounds, 6 percent above 1979 production. The Kansas cattle slaughter increased 7 percent from 1979 and continued to rank fourth in the nation for the number of head killed during 1980. The commercial hog slaughter numbered 1,459,800 head, an increase of 4 percent. Sheep and lambs killed jumped 22 percent from 1979 to 4,500 head. Calf slaughter, at 300 head, fell 200 head from the 1979 kill.

HONEY PRODUCTION HIGHER

Kansas apiaries produced 2,150,000 pounds of honey in 1980, 8 percent more than the 1979 production. The number of colonies was up 8 percent to 43,000, but the yield per colony was unchanged at 50 pounds. The average price received for honey was 57.7 cents per pound, down 9.5 cents from the 1979 record price.

ALL CATTLE AND CALVES JANUARY 1, 1981

1 Dot=5,000 Head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ATCHISON
SHERMAN
THOMAS
SHERIDAN
GRAHAM
ROOKS
OSBORNE
MITCHELL
CLOUD
CLAY
RILEY
POTTAWATOMIE
JACKSON
JEFFERSON
LEAVENWORTH
WYAN
OTTAWA
SHAWNEE
WALLACE
LOGAN
GOVE
TREGO
ELLIS
RUSSELL
LINCOLN
GEARY
WABAUNSEE
DOUGLAS
JOHNSON
SALINE
DICKINSON
MORRIS
OSAGE
FRANKLIN
MIAMI
ELLSWORTH
LYON
GREELEY
WICHITA
SCOTT
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BARTON
McPHERSON
MARION
CHASE
COFFEY
ANDERSON
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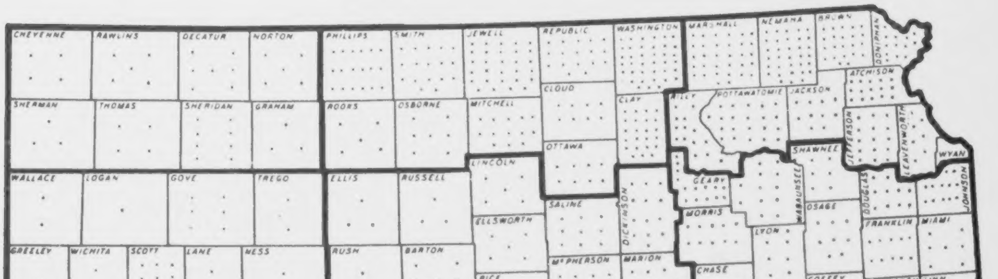
PAWNEE
STAFFORD
HAMILTON
KEARNY
FINNEY
HODGEMAN
RENO
HARVEY
BUTLER
GREENWOOD
WOODSON
ALLEN
BOURBON
EDWARDS
GRAY
FORD
SEDGWICK
PRATT
WILSON
NEOSHO
CRAWFORD
STANTON
GRANT
HASKELL
KIOWA
KINGMAN
ELK
MEADE
CLARK
SUMNER
COWLEY
MONTGOMERY
LABETTE
CHEROKEE
MORTON
STEVENS
SEWARD
COMANCHE
BARBER
HARPER
CHAUTAUQUA

ALL HOGS AND PIGS, DECEMBER 1, 1980

1 Dot=2,000 Head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CHEROKEE
MORTON
STEVENS
SEWARD
COMANCHE
BARBER
HARPER
CHAUTAUQUA

LIVESTOCK AND POULTRY ON FARMS, January 1

Classes of Livestock and Poultry	1980		1981	
	Number	Farm value, dollars	Number	Farm value, dollars
All cattle and calves	6,200,000	2,821,000,000	6,450,000	2,612,250,000
Beef cows	1,716,000	875,160,000	1,897,000	834,680,000
Milk cows	120,000	128,400,000	123,000	138,990,000
Other cattle and calves	4,364,000	1,817,440,000	4,430,000	1,638,580,000
All sheep and lambs	235,000	16,450,000	200,000	12,500,000
Hogs and pigs°	2,090,000	106,590,000	1,900,000	123,500,000
All Chickens°	2,470,000	4,323,000	2,140,000	3,424,000
Total value of livestock		2,948,363,000		2,751,674,000

° December 1 preceding year.

PRODUCTION AND VALUE, 1973-80

Year	Chickens (Excludes commercial broilers)		Turkeys		Honey		Wool	
	Quantity (000 No.)	Farm value (000 dollars)	Quantity (000 No.)	Farm value (000 dollars)	Quantity (000 lbs.)	Farm value (000 dollars)	Quantity (000 lbs.)	Farm value (000 dollars)
1973	2,865	1,180	210	1,698	2,250	954	2,444	1,564
1974	2,715	1,030	165	1,016	1,892	986	2,116	1,100
1975	2,386	611	154	1,417	2,162	1,100	1,573	613
1976	2,484	1,220	108	968	2,600	1,212	1,483	905
1977	1,980	1,148	113	999	2,392	1,160	1,702	1,140
1978	1,940	1,432	129	1,249	2,580	1,507	1,712	1,181
1979	1,630	1,627	184	1,619	2,000	1,344	1,784	1,392
1980	1,360	1,251	132	1,214	2,150	1,241	1,699	1,308

FEED SUPPLIES AVAILABLE FOR LIVESTOCK, 1964-80

Feeding Year	Grain				Roughage					Grain and roughage supply T.D.N.[3]
	Feed grains[1]		Cereal grains fed	Total supply	Hay		Sorghum forage	Sorghum and corn silage	Hay equivalent of all roughage[2]	
	Production	Farm carry-over			Production	Farm carry-over				
	1,000 Tons									
1964-65	4,460	422	73	4,955	4,341	713	1,130	6,776	7,878	7,903
1965-66	5,833	362	99	6,294	5,523	695	1,229	7,438	9,312	9,691
1966-67	5,787	385	63	6,235	4,077	1,215	1,196	7,717	8,462	9,219
1967-68	6,349	394	82	6,825	5,282	652	1,237	7,320	8,993	9,957
1968-69	7,251	375	153	7,779	4,721	1,004	1,187	7,105	8,687	10,567
1969-70	8,026	485	211	8,722	5,113	755	1,617	6,765	8,932	11,444
1970-71	6,682	463	232	7,377	4,102	1,125	997	5,714	7,631	9,718
1971-72	10,326	277	330	10,933	5,255	697	1,100	8,089	9,198	13,345
1972-73	9,925	476	164	10,565	5,549	1,209	1,440	8,500	10,311	13,608
1973-74	10,559	289	66	10,914	5,796	832	1,050	8,175	9,878	13,670
1974-75	7,542	342	59	7,943	4,229	985	897	6,439	7,809	10,259
1975-76	8,183	172	54	8,409	4,890	719	378	5,559	7,651	10,553
1976-77	9,621	227	143	9,991	4,685	929	494	6,574	8,052	12,019
1977-78	11,331	458	230	12,019	5,445	703	1,050	7,955	9,325	14,278
1978-79	9,921	649	83	10,653	4,720	1,089	728	5,749	8,089	12,567
1979-80	11,833	694	77	12,604	5,840	755	1,360	7,760	9,862	15,014
1980-81	7,780	661	65	8,506	4,230	993	1,183	6,579	8,008	10,809

1. Sorghum grain, corn, barley and oats.
2. Assumes 3 tons of silage or 2 tons of dry forage are equivalent to 1 ton of hay.
3. Converted to total digestable nutrients at 0.8 for grain and 0.5 for roughage.

LIVESTOCK SLAUGHTER IN COMMERCIAL PLANTS, 1980 *

Species and Month	Number of head slaughtered [1]	Average liveweight lbs. per head	Total liveweight (000 lbs.) [1]	Dressed weight (000 lbs.) [1]
Cattle				
January	262,100	1,107	290,026	180,224
February	238,300	1,093	260,354	160,228
March	221,800	1,101	244,223	150,544
April	242,500	1,081	262,206	163,199
May	230,200	1,082	249,186	154,846
June	223,700	1,081	241,881	150,790
July	228,100	1,060	241,825	150,272
August	236,200	1,046	247,063	153,527
September	255,500	1,065	272,194	168,873
October	298,300	1,084	323,197	200,515
November	250,800	1,096	274,927	169,745
December	280,600	1,101	308,964	191,377
Total	2,968,100	1,084	3,216,045	1,994,140
Calves[2]				
Total	300	322	110	59
Hogs				
January	120,900	257	31,038	22,503
February	109,800	244	26,734	19,409
March	125,600	241	30,325	22,107
April	148,200	240	35,604	25,884
May	131,300	241	31,703	22,985
June	115,700	244	28,183	20,320
July	113,100	241	27,263	19,776
August	111,600	237	26,439	19,063
September	127,900	239	30,599	21,970
October	123,900	246	30,538	21,835
November	108,300	246	26,614	19,162
December	123,600	251	30,971	22,237
Total	1,459,800	244	356,013	257,241
Sheep and Lambs				
January	200	114	28	14
February	200	117	26	13
March	300	115	37	20
April	300	116	34	19
May	300	113	34	17
June	400	106	39	19
July	300	101	34	17
August	600	106	68	35
September	600	101	56	31
October	500	107	50	30
November	400	108	42	23
December	400	126	44	21
Total	4,500	110	492	259

* Includes slaughter under Federal Inspection and other commercial slaughter; excludes farm slaughter.

1. May not add to total due to rounding.
2. Not published monthly to avoid disclosing individual operations.

RED MEAT PRODUCTION, 1973-80

Year	Number of Plants	Beef	Veal	Pork	Lamb, Mutton	Total Dressed Meat	Value (million dollars)
		(000 pounds)					
1973	204	1,559,974	85	336,131	239	1,896,429	1,319.1
1974	216	1,668,419	428	345,725	336	2,014,908	1,565.1
1975	205	1,737,250	1,305	207,206	368	1,946,129	1,426.7
1976	204	1,881,027	295	155,127	233	2,036,682	1,296.2
1977	205	1,989,670	234	183,938	237	2,174,079	1,370.6
1978	207	1,916,200	204	193,308	244	2,109,956	1,712.4
1979	202	1,876,070	65	245,291	216	2,121,642	2,121.0
1980	201	1,994,140	59	257,241	259	2,251,699	2,315.2

CATTLE AND CALVES, INVENTORY, SUPPLY AND DISPOSITION, 1973-80

Year	Inventory Beginning of Year	Calf Crop	Inshipments	Marketings		Farm Slaughter	Deaths	
				Cattle	Calves		Cattle	Calves
	1,000 Head							
1973	6,800	2,050	2,600	4,077	51	7	115	210
1974	6,990	2,000	1,650	3,956	42	12	80	150
1975	6,400	1,880	2,168	3,678	53	7	110	150
1976	6,450	1,670	2,650	4,108	56	6	85	115
1977	6,400	1,550	3,055	4,715	63	7	100	120
1978	6,000	1,650	3,230	4,363	61	6	100	150
1979	6,200	1,680	2,864	4,248	56	6	94	140
1980	6,200	1,850	2,712	4,021	52	6	88	145

CATTLE AND CALVES, PRODUCTION AND INCOME, 1973-80

Year	Production (000 lbs.)	Marketings (000 lbs.)	Avg. Price Per Cwt.		Value of Production (000 dollars)	Cash Receipts (000 dollars)	Value of Home Consumption (000 dollars)	Gross Income (000 dollars)
			Cattle (dollars)	Calves (dollars)				
1973	2,795,410	4,263,430	44.40	53.60	1,243,511	1,894,622	9,776	1,904,398
1974	2,739,800	4,114,580	34.40	38.80	940,978	1,416,015	14,198	1,430,213
1975	2,393,795	3,728,395	29.80	26.40	714,807	1,110,440	7,165	1,117,605
1976	2,579,350	4,252,730	34.40	35.40	887,052	1,463,127	7,047	1,470,174
1977	2,701,240	4.982,810	35.00	39.00	944,175	1,744,847	8,539	1,753,386
1978	2,586,490	4,608,140	52.10	60.20	1,354,318	2,402,284	10,774	2,413,058
1979	2,660,520	4,556,840	70.10	92.60	1,873,392	3,197,531	24,934	3,222,465
1980	2,766,030	4,340,710	65.30	76.50	1,811,855	2,835,953	29,084	2,865,037

HOGS AND PIGS, INVENTORY, SUPPLY AND DISPOSITION, 1973-80

Year	On Hand Dec. 1 Prev. Year	Pig Crop		Inshipments	Marketings	Farm Slaughter	Deaths
		Dec.-May	June-Nov.				
	1,000 Head						
1973	2,100	1,637	1,401	113	3,088	13	150
1974	2,000	1,540	1,351	195	3,201	15	120
1975	1,750	1,089	1,191	199	2,442	12	125
1976	1,650	1,403	1,346	229	2,617	11	150
1977	1,850	1,655	1,485	233	3,077	13	133
1978	2,000	1,417	1,513	216	2,974	12	160
1979	2,000	1,604	1,648	325	3,305	12	170
1980	2,090	1,646	1,426	225	3,300	12	175

HOGS AND PIGS, PRODUCTION AND INCOME, 1973-80

Year	Production (000 lbs.)	Marketings (000 lbs.)	Average Price Per Cwt. (dollars)	Value of Production (000 dollars)	Cash Receipts (000 dollars)	Value of Home Consumption (000 dollars)	Gross Income (000 dollars)
1973	737,888	747,170	39.10	288,514	292,143	3,416	295,559
1974	747,150	776,100	34.40	257,020	266,978	4,334	271,312
1975	582,405	586,345	45.00	258,799	263,975	6,480	270,455
1976	643,220	618,275	44.10	279,756	272,764	5,821	278,585
1977	738,785	713,795	40.00	292,202	285,667	4,992	290,659
1978	686,235	680,855	47.00	318,285	320,908	6,768	327,676
1979	795,985	794,080	41.90	329,536	332,995	6,159	339,154
1980	777,883	794,388	36.90	284,409	293,488	4,339	297,827

SHEEP AND LAMBS, INVENTORY, SUPPLY AND DISPOSITION, 1973-80

Year	Inventory Beginning of Year	Lamb Crop	Inshipments	Marketings		Farm Slaughter	Deaths	
				Sheep	Lambs		Sheep	Lambs
	1,000 Head							
1973	331	200	65	31	232	1	18	24
1974	290	180	50	43	221	1	15	20
1975	220	147	62	35	196	1	14	18
1976	165	120	64	8	147	1	9	11
1977	173	126	93	17	145	1	10	14
1978	205	124	88	7	163	1	10	16
1979	220	134	114	20	188	1	9	15
1980	235	145	96	32	216	1	8	19

SHEEP AND LAMBS, PRODUCTION AND INCOME, 1973-80

Year	Production (000 lbs.)	Marketings (000 lbs.)	Avg. Price Per Cwt.		Value of Production (000 dollars)	Cash Receipts (000 dollars)	Value of Home Consumption (000 dollars)	Gross Income (000 dollars)
			Sheep (dollars)	Lambs (dollars)				
1973	16,365	24,633	9.90	35.20	5,658	7,729	51	7,780
1974	14,738	25,098	9.60	38.90	5,621	8,251	57	8,308
1975	12,333	21,918	7.70	39.50	4,832	7,322	58	7,380
1976	11,173	14,239	10.00	48.40	5,115	6,523	65	6,588
1977	11,931	15,159	10.10	49.20	5,249	6,660	67	6,727
1978	13,372	17,154	16.20	60.70	7,569	10,039	88	10,127
1979	15,388	21,205	31.00	65.40	9,520	13,042	88	13,130
1980	14,089	23,329	22.00	63.50	8,162	13,220	86	13,306

EGGS, PRODUCTION, DISPOSITION AND INCOME, 1973-80

Year	Eggs Produced (millions)	Home Consumption (millions)	Eggs Sold (millions)	Price Per Dozen (cents)	Cash Receipts (000 dollars)	Value of Home Consumption (000 dollars)	Gross Income (000 dollars)
1973	673	18	655	40.6	22,161	609	22,770
1974	601	14	587	41.0	20,056	478	20,534
1975	599	13	586	39.4	19,240	427	19,667
1976	564	12	552	45.2	20,792	452	21,244
1977	548	13	535	44.1	19,661	478	20,139
1978	511	13	498	41.8	17,347	453	17,800
1979	483	13	470	49.0	19,192	531	19,723
1980	427	13	414	44.3	15,284	480	15,764

MILK, DISPOSITION, INCOME AND VALUE, 1973-80

Year	Combined Marketings of Milk and Cream				Milk Consumed on Farms Where Produced		Gross Farm Income from Milk (000 dollars)	Farm Value of Milk Produced (000 dollars)
	Milk Utilized (mil. lbs.)	Average Returns		Cash Receipts (000 dollars)	(mil. lbs.)	Value (000 dollars)		
		Milk, dollars per cwt.	Milkfat, dollars per pound					
1973	1,449	7.06	1.94	102,286	30	2,118	104,404	106,253
1974	1,355	8.19	2.28	110,978	26	2,129	113,107	114,906
1975	1,347	8.79	2.43	118,460	23	2,022	120,482	122,357
1976	1,403	9.38	2.58	131,609	21	1,970	133,579	135,729
1977	1,399	9.61	2.65	134,442	19	1,826	136,268	138,576
1978	1,342	10.74	2.94	144,147	14	1,504	145,651	147,353
1979	1,302	12.05	3.30	156,865	10	1,205	158,070	160,265
1980	1,328	13.16	3.64	174,781	9	1,184	175,965	178,318

CATTLE, JAN. 1, 1980, AND CALVES BORN, 1980

County	All Cattle and Calves		Cows that have calved		Calves born, 1980	Cattle on feed
	Number	Value, dollars	Beef, Number	Milk, Number	Number	Number
Northwest District:						
Cheyenne	37,300	16,933,100	15,600	500	14,900	9,200
Decatur	52,600	23,878,800	17,700	800	18,400	13,500
Graham	42,500	19,293,700	20,900	550	22,200	500
Norton	44,200	20,065,500	18,500	900	19,700	900
Rawlins	44,000	19,974,700	23,500	1,300	23,400	800
Sheridan	64,500	29,281,100	17,400	1,200	16,200	21,500
Sherman	37,100	16,842,300	8,700	350	8,000	10,600
Thomas	48,800	22,153,800	9,700	200	9,700	5,900
District total	371,000	168,423,000	132,000	5,800	132,500	62,900
West Central District:						
Gove	78,500	37,628,700	20,300	750	19,900	24,000
Greeley	44,400	21,283,000	4,300	50	4,500	33,000
Lane	63,200	30,294,700	7,300	50	7,300	29,000
Logan	39,800	19,078,000	16,300	250	17,300	1,600
Ness	62,300	29,863,300	21,800	400	20,900	1,100
Scott	132,200	63,369,500	5,000	50	5,800	92,700
Trego	52,700	25,261,500	17,200	800	17,600	7,000
Wallace	23,000	11,025,000	10,900	250	10,500	1,200
Wichita	104,900	50,283,300	6,900	100	7,200	86,300
District total	601,000	288,087,000	110,000	2,700	111,000	275,900
Southwest District:						
Clark	53,800	25,599,200	9,800	50	9,900	9,500
Finney	136,800	65,092,400	8,500	100	8,100	86,600
Ford	154,000	73,276,400	9,300	800	8,800	76,000
Grant	102,200	48,629,000	5,900	50	6,200	54,000
Gray	111,700	53,149,300	7,400	50	5,900	53,500
Hamilton	38,700	18,414,300	4,500	50	4,400	24,000
Haskell	151,400	72,039,400	8,600	100	7,700	118,300
Hodgeman	77,200	36,733,400	9,800	600	8,500	20,000
Kearny	67,500	32,118,000	6,600	50	7,000	48,000
Meade	46,500	22,125,700	12,200	400	11,800	7,300
Morton	30,200	14,369,800	6,500	50	5,900	700
Seward	67,500	32,118,000	3,800	50	3,700	46,000
Stanton	42,100	20,032,100	4,000	50	4,200	23,000
Stevens	41,400	19,699,000	8,100	100	7,600	25,400
District total	1,121,000	533,396,000	105,000	2,500	99,700	592,300
North Central District:						
Clay	49,500	21,983,000	18,000	1,000	20,100	1,600
Cloud	39,500	17,542,000	16,500	500	18,000	1,400
Jewell	65,700	29,177,500	25,000	950	26,500	2,500
Mitchell	48,100	21,361,300	13,200	300	14,200	9,400
Osborne	57,300	25,447,000	21,200	550	21,700	3,900
Ottawa	54,800	24,336,800	16,000	700	16,100	4,700
Phillips	72,100	32,019,700	31,600	500	34,100	900
Republic	61,200	27,179,000	17,600	900	17,200	12,100
Rooks	52,300	23,226,500	20,000	1,100	22,300	3,400
Smith	68,600	30,465,400	26,200	1,000	28,800	2,900
Washington	90,900	40,368,800	24,700	2,600	25,700	5,400
District total	660,000	293,107,000	230,000	10,100	244,700	48,200
Central District:						
Barton	88,500	40,737,900	21,200	750	19,800	43,000
Dickinson	65,900	30,334,700	19,000	1,800	20,400	8,500
Ellis	69,500	31,991,900	23,100	1,200	21,700	15,500
Ellsworth	39,700	18,274,500	22,000	350	22,900	300
Lincoln	53,000	24,396,700	21,900	850	21,900	500
McPherson	61,800	28,447,400	15,900	2,900	16,700	6,700
Marion	91,700	42,210,900	15,100	4,700	20,700	2,000
Rice	58,000	26,698,200	10,000	1,150	10,300	6,300
Rush	38,800	17,860,200	12,700	200	13,500	500
Russell	40,500	18,642,700	21,000	850	23,600	500
Saline	53,600	24,672,900	15,100	1,750	15,800	9,800
District total	661,000	304,268,000	197,000	16,500	207,300	93,600

CATTLE AND CALVES—*Concluded*

County	All Cattle and Calves		Cows that have calved		Calves born, 1980	Cattle on feed
	Number	Value, dollars	Beef, Number	Milk, Number	Number	Number
South Central District:						
Barber	84,000	37,304,500	25,300	900	26,400	1,200
Comanche	42,900	19,051,900	16,200	300	17,400	1,600
Edwards	45,200	20,073,400	6,000	400	6,700	10,200
Harper	60,600	26,912,500	14,300	700	14,600	700
Harvey	45.300	20,117,800	5,900	2,300	8,100	3,300
Kingman	53,700	23,848,200	20,600	2,100	24,400	800
Kiowa	36,400	16,165,300	12,200	50	12,900	900
Pawnee	48,800	21,672,100	9,500	300	10,300	20,000
Pratt	52,600	23,359,700	9,800	500	10,800	17,200
Reno	89,800	39,880,300	24,300	3,900	27,800	13,000
Sedgwick	58,000	25,757,800	13,700	7,200	22,000	3,600
Stafford	53,100	23,581,800	15,000	250	16,100	7,800
Sumner	52,600	23,359,700	16,200	1,100	18,200	1,500
District total	723,000	321,085,000	189,000	20,000	215,700	81,800
Northeast District:						
Atchison	37,500	17,182,500	13,000	1,700	15,600	1,300
Brown	48,300	22,131,100	16,700	2,400	20.300	3,500
Doniphan	26,100	11,959,000	8,800	900	10,300	1,800
Jackson	62,900	28,820,800	25,200	2,100	28,400	500
Jefferson	48,500	22,222,700	16,400	2,700	20,300	800
Leavenworth	45,400	20,802,300	11,800	3,900	16,700	400
Marshall	60,700	27,812,700	19,200	3,450	24,100	1,000
Nemaha	70,500	32,303,100	19.000	5,600	25,700	1,600
Pottawatomie	76,600	35,098,100	26,900	2,400	26,900	2,400
Riley	38,800	17,778,200	14,000	1,500	15,800	1,600
Wyandotte	4,700	2,153,500	2,000	250	2,200	100
District total	520,000	238,264,000	173,000	26,900	206,300	15,000
East Central District:						
Anderson	56,600	24,737,100	21,900	2,300	25,300	800
Chase	52,400	22,901,500	17,600	250	18,700	2,800
Coffey	49,200	21,502,900	15,600	500	16,900	1,400
Douglas	39,100	17,088,700	12,600	2,700	16,000	1,500
Franklin	53,000	23,163,700	18,400	2,900	22,300	1,000
Geary	21,200	9,265,500	9,400	800	10,700	400
Johnson	27,000	11,800,400	10,100	850	11,500	600
Linn	48,800	21,328,100	21,600	1,400	24,100	900
Lyon	77,900	34,046,300	23,100	1,200	22,500	9,300
Miami	52,400	22,901,500	21,800	2,300	25,200	700
Morris	85,800	37,499,000	24,300	1,650	26,000	3,000
Osage	45,100	19,711,000	16,700	550	18,100	1,100
Shawnee	27,000	11,800,400	11,200	700	12,500	900
Wabaunsee	66,500	29,063,900	23,700	1,000	25,900	1,200
District total	702,000	306,810,000	248,000	19,100	275,700	25,600
Southeast District:						
Allen	41,400	18,093,900	17,800	2,250	20,800	800
Bourbon	69,500	30,375,100	24,800	2,100	29,000	900
Butler	116,500	50,916,400	34,400	1,500	29,400	23,000
Chautauqua	55,200	24,125,200	28,800	400	31,500	2,400
Cherokee	32,400	14,160,500	17,100	400	18,900	500
Cowley	96,300	42,088,000	32,600	900	34,200	14,400
Crawford	45,400	19,842,100	21,200	1,200	24,100	1,900
Elk	48,400	21,153,300	22,100	150	24,000	600
Greenwood	87,300	38,154,600	36,000	1,100	39,800	1,200
Labette	80,000	34,964,100	23,700	2,000	23,400	18,600
Montgomery	38,800	16,957,600	19,200	1,150	20,000	400
Neosho	50,700	22,158,500	20,900	2,050	24,700	1,600
Wilson	35,200	15,384,200	17,000	700	19,100	500
Woodson	43,900	19,186,500	16,400	500	18,200	7,900
District total	841,000	367,560,000	332,000	16,400	357,100	74,700
State	6,200,000	2,821,000,000	1,716,000	120,000	1,850,000	1,270,000

CATTLE, JANUARY 1, 1981

County	All Cattle and Calves		Cows that have calved			Cattle on feed, number
	Number	Value, dollars	Beef, number	Milk, number	Total cows, number	
Northwest District:						
Cheyenne	28,900	11,282,400	15,400	500	15,900	4,800
Decatur	45,500	17,762,900	19,100	850	19,950	12,400
Graham	40,500	15,810,900	23,300	650	23,950	300
Norton	42,300	16,513,600	20,700	900	21,600	600
Rawlins	43,600	17,021,200	23,500	1,650	25,150	500
Sheridan	62,000	24,204,400	15,600	1,250	16,850	16,700
Sherman	37,400	14,600,700	8,200	300	8,500	9,300
Thomas	37,800	14,756,900	10,200	200	10,400	7,400
District total	338,000	131,953,000	136,000	6,300	142,300	52,000
West Central District:						
Gove	83,800	37,073,700	20,900	800	21,700	24,500
Greeley	43,500	19,244,700	5,000	50	5,050	27,000
Lane	63,100	27,915,800	7,800	50	7,850	24,800
Logan	51,700	22,872,400	19,700	250	19,950	2,500
Ness	65,400	28,933,400	21,500	450	21,950	900
Scott	148,900	65,874,200	6,600	50	6,650	67,400
Trego	56,000	24,774,800	18,300	900	19,200	7,500
Wallace	20,800	9,202,100	10,700	250	10,950	700
Wichita	80,800	35,746,400	7,500	100	7,600	66,000
District total	614,000	271,637,500	118,000	2,900	120,900	221,300
Southwest District:						
Clark	61,100	26,825,100	11,200	50	11,250	7,100
Finney	127,000	55,757,500	8,800	100	8,900	71,000
Ford	155,000	68,050,500	8,300	900	9,200	74,200
Grant	83,900	36,835,100	6,700	50	6,750	56,300
Gray	100,000	43,903,600	5,900	50	5,950	47,000
Hamilton	31,700	13,917,400	4,600	50	4,650	25,200
Haskell	142,000	62,343,100	7,900	100	8,000	91,600
Hodgeman	81,700	35,869,200	8,100	650	8,750	19,400
Kearny	66,800	29,327,600	7,700	50	7,750	39,900
Meade	43,500	19,098,100	12,100	450	12,550	5,600
Morton	32,900	14,444,300	6,400	50	6,450	1,100
Seward	68,500	30,073,900	4,000	50	4,050	37,900
Stanton	46,300	20,327,400	4,300	50	4,350	26,800
Stevens	39,600	17,385,800	8,000	100	8,100	20,900
District total	1,080,000	474,158,600	104,000	2,700	106,700	524,000
North Central District:						
Clay	62,400	24,257,500	21,700	1,100	22,800	900
Cloud	33,600	13,061,700	20,300	500	20,800	800
Jewell	56,100	21,808,400	27,100	850	27,950	1,900
Mitchell	50,700	19,709,200	14,700	300	15,000	8,400
Osborne	61,900	24,063,100	22,000	550	22,550	2,400
Ottawa	58,200	22,624,700	16,100	650	16,750	7,000
Phillips	74,400	28,922,400	35,900	400	36,300	300
Republic	59,100	22,974,600	17,000	800	17,800	10,400
Rooks	63,000	24,490,700	24,900	1,100	26,000	2,600
Smith	72,600	28,222,600	30,100	1,050	31,150	2,400
Washington	103,000	40,040,300	24,200	2,600	26,800	5,500
District total	695,000	270,175,200	254,000	9,900	263,900	42,600
Central District:						
Barton	96,500	38,789,100	21,200	700	21,900	45,100
Dickinson	66,000	26,529,300	20,200	1,850	22,050	6,600
Ellis	68,000	27,333,200	21,500	1,350	22,850	23,900
Ellsworth	43,300	17,404,800	25,600	350	25,950	200
Lincoln	57,800	23,233,200	22,300	850	23,150	800
McPherson	64,200	25,865,800	14,700	2,900	17,600	5,200
Marion	89,900	36,136,100	19,700	4,800	24,500	1,100
Rice	63,800	25,645,000	9,300	1,200	10,500	3,400
Rush	32,600	13,103,900	15,000	200	15,200	300
Russell	51,900	20,861,700	24,400	900	25,300	400
Saline	45,000	18,088,200	15,100	1,600	16,700	7,600
District total	679,000	272,930,300	209,000	16,700	225,700	94,600

CATTLE, JANUARY 1, 1981—*Concluded*

County	All Cattle and Calves		Cows that have calved			Cattle on feed, number
	Number	Value, dollars	Beef, number	Milk, number	Total cows, number	
South Central District:						
Barber	74,200	30,183,400	26,900	800	27,700	1,000
Comanche	48,500	19,729,000	20,000	300	20,300	1,300
Edwards	42,500	17,288,300	7,000	400	7,400	14,100
Harper	71,100	28,922,300	14,700	600	15,300	600
Harvey	45,500	18,508,700	6,400	2,250	8,650	1,700
Kingman	56,800	23,105,300	24,400	1,850	26,250	700
Kiowa	39,300	15,986,600	15,000	50	15,050	800
Pawnee	43,100	17,532,400	11,100	300	11,400	11,800
Pratt	48,200	19,607,000	11,700	450	12,150	15,000
Reno	84,400	34,332,600	25,500	4,000	29,500	8,900
Sedgwick	61,800	25,139,200	16,200	7,900	24,100	4,800
Stafford	60,000	24,407,000	17,900	250	18,150	7,900
Sumner	57,600	23,430,700	19,200	1,150	20,350	700
District total	733,000	298,172,500	216,000	20,300	236,300	69,300
Northeast District:						
Atchison	41,200	16,182,200	16,300	1,650	17,950	700
Brown	56,000	21,995,300	22,600	2,650	25,250	2,400
Doniphan	29,800	11,704,600	11,300	950	12,250	1,200
Jackson	64,900	25,491,000	28,600	1,900	30,500	400
Jefferson	56,300	22,113,100	20,000	2,750	22,750	600
Leavenworth	51,700	20,306,400	14,200	3,750	17,950	300
Marshall	68,100	26,747,800	22,900	3,450	26,350	1,800
Nemaha	81,800	32,128,800	20,800	6,000	26,800	1,900
Pottawatomie	81,900	32,168,100	25,400	2,350	27,750	1,100
Riley	40,900	16,064,400	14,900	1,500	16,400	900
Wyandotte	4,400	1,728,200	2,000	250	2,250	100
District total	577,000	226,629,900	199,000	27,200	226,200	11,400
East Central District:						
Anderson	64,500	24,315,000	26,600	2,650	29,250	700
Chase	56,200	21,186,100	22,100	250	22,350	1,400
Coffey	57,400	21,638,500	18,300	500	18,800	800
Douglas	48,800	18,396,500	15,000	2,650	17,650	700
Franklin	61,500	23,184,100	21,300	3,300	24,600	1,100
Geary	27,500	10,366,900	11,500	850	12,350	300
Johnson	29,600	11,158,500	12,000	900	12,900	300
Linn	52,800	19,904,400	26,	1,200	27,300	700
Lyon	85,100	32,080,800	22,400	1,100	23,500	11,200
Miami	68 100	25,672,100	26,700	2,150	28,850	600
Morris	84,600	31,892,300	26,500	1,550	28,050	1,400
Osage	44,100	16,624,700	20,900	600	21,500	900
Shawnee	29,600	11,158,500	12,600	750	13,350	800
Wabaunsee	80,200	30,233,600	30,000	1,050	31,050	900
District total	790,000	297,812,000	292,000	19,500	311,500	21,800
Southeast District:						
Allen	48,500	18,946,900	19,400	2,500	21,900	600
Bourbon	82,100	32,073,000	29,200	2,200	31,400	700
Butler	107,000	41,800,400	27,800	1,450	29,250	18,600
Chautauqua	56,300	21,994,000	33,900	450	34,350	1,600
Cherokee	36,800	14,376,200	20,700	350	21,050	400
Cowley	118,000	46,097,600	34,100	1,050	35,150	17,200
Crawford	58,300	22,775,400	27,300	1,400	28,700	1,200
Elk	53,500	20,900,200	27,100	150	27,250	500
Greenwood	113,000	44,144,300	43,200	1,300	44,500	900
Labette	74,500	29,104,000	22,200	1,800	24,000	16,100
Montgomery	37,800	14,766,900	18,900	1,200	20,100	300
Neosho	65,900	25,744,400	25,600	2,350	27,950	1,200
Wilson	45,000	17,579,600	21,400	750	22,150	400
Woodson	47 300	18,478,100	18,200	550	18,750	3,300
District total	944,000	368,781,000	369,000	17,500	386,500	63,000
State	6,450,000	2,612,250,000	1,897,000	123,000	2,020,000	1,100,000

HOGS AND SHEEP ON FARMS

County	Hogs and pigs December 1, 1979		Pig crop 1979	All sheep and lambs January 1, 1980	
	Number	Value, dollars	Number	Number	Value, dollars
Northwest District:					
Cheyenne	10,000	508,100	18,000	100	7,400
Decatur	15,300	777,400	23,000	500	37,000
Graham	5,700	289,600	12,000	500	37,000
Norton	10,800	548,800	25,000	2,200	163,000
Rawlins	11,500	584,300	20,000	3,800	281,600
Sheridan	18,000	914,700	20,000	1,800	133,400
Sherman	6,200	315,000	9,000	3,000	222,300
Thomas	9,500	482,700	17,000	4,900	363,100
District total	87,000	4,420,600	144,000	16,800	1,244,800
West Central District:					
Gove	11,000	571,000	15,600	1,300	94,600
Greeley	2,500	129,800	5,900	300	21,800
Lane	4,500	233,600	8,200	900	65,500
Logan	2,100	109,000	4,500	8,400	611,500
Ness	3,600	186,900	7,100	1,700	123,800
Scott	21,300	1,105,700	26,000	1,800	131,000
Trego	4,900	254,400	8,300	1,600	116,500
Wallace	4,700	244,000	9,100	6,100	444,000
Wichita	6,400	332,200	8,300	10,200	742,500
District total	61,000	3,166,600	93,000	32,300	2,351,200
Southwest District:					
Clark	900	46,700	1,200	200	14,500
Finney	8,000	415,300	8,300	500	36,400
Ford	23,800	1,235,500	36,500	500	36,400
Grant	7,100	368,600	15,100	600	43,700
Gray	9,900	513,900	12,400	3,200	233,000
Hamilton	2,600	135,000	4,500	200	14,500
Haskell	7,300	379,000	10,600	100	7,300
Hodgeman	2,600	135,000	4,500	200	14,500
Kearny	4,700	244,000	7,100	2,200	160,100
Meade	°	°	°	1,000	72,800
Morton	1,000	51,900	1,200	100	7,300
Seward	°	°	°	100	7,300
Stanton	1,500	77,900	2,400	600	43,700
Stevens	3,200	166,100	5,900	100	7,300
District total	144,400	7,496,000	222,000	9,600	698,800
North Central District:					
Clay	53,000	2,686,600	86,300	600	41,500
Cloud	21,000	1,064,500	34,300	900	62,400
Jewell	61,500	3,117,400	99,700	6,300	436,500
Mitchell	34,000	1,723,400	50,700	3,500	242,500
Osborne	16,000	811,000	27,200	3,400	235,600
Ottawa	18,000	912,400	22,500	800	55,400
Phillips	40,900	2,073,200	73,300	900	62,400
Republic	39,000	1,976,900	69,200	4,600	318,700
Rooks	10,000	506,900	17,700	1,000	69,300
Smith	41,400	2,098,600	67,300	1,600	110,900
Washington	88,600	4,491,100	119,800	4,400	304,900
District total	423,400	21,462,000	668,000	28,000	1,940,100
Central District:					
Barton	12,000	601,000	28,400	2,100	148,700
Dickinson	31,000	1,552,500	46,100	3,600	254,900
Ellis	7,100	355,600	13,000	800	56,600
Ellsworth	11,300	565,900	16,600	500	35,400
Lincoln	12,000	601,000	18,900	3,000	212,400
McPherson	25,000	1,252,000	39,000	5,500	389,300
Marion	38,500	1,927,800	63,800	2,700	191,100
Rice	22,900	1,146,800	29,600	3,300	233,600
Rush	2,000	100,200	2,400	900	63,700
Russell	6,200	310,500	10,600	1,000	70,800
Saline	17,500	876,400	33,600	900	63,700
District total	185,500	9,289,700	302,000	24,300	1,720,200

HOGS AND SHEEP ON FARMS—*Concluded*

County	Hogs and pigs December 1, 1979		Pig crop 1979	All sheep and lambs January 1, 1980	
	Number	Value, dollars	Number	Number	Value, dollars
South Central District:					
Barber	4,400	223,000	10,600	3,800	268,200
Comanche	3,400	172,300	6,300	2,400	169,400
Edwards	3,000	152,100	3,600	900	63,500
Harper	7,200	365,000	11,800	2,500	176,500
Harvey	29,200	1,480,100	49,100	7,000	494,100
Kingman	14,300	724,900	18,600	3,000	211,800
Kiowa	12,500	633,600	21,300	1,000	70,600
Pawnee	13,100	664,000	16,200	1,600	112,900
Pratt	25,000	1,267,200	33,100	800	56,500
Reno	34,000	1,723,500	52,000	19,500	1,376,500
Sedgwick	35,600	1,804,600	49,700	17,300	1,221,200
Stafford	8,000	405,500	15,900	2,600	183,500
Sumner	25,900	1,312,900	43,800	4,500	317,700
District total	215,600	10,928,700	332,000	66,900	4,722,400
Northeast District:					
Atchison	30,900	1,585,200	55,600	700	45,200
Brown	44,900	2,303,400	70,000	1,500	96,900
Doniphan	30,700	1,574,900	48,500	1,400	90,400
Jackson	25,000	1,282,500	39,000	2,700	174,300
Jefferson	26,400	1,354,300	40,200	500	32,300
Leavenworth	13,800	707,900	20,100	800	51,700
Marshall	62,000	3,180,600	76,900	1,600	103,300
Nemaha	75,600	3,878,500	120,800	1,200	77,500
Pottawatomie	40,900	2,098,200	72,100	1,500	96,900
Riley	28,600	1,467,200	42,600	1,000	64,600
Wyandotte	800	41,000	1,200	100	6,500
District total	379,600	19,473,700	587,000	13,000	839,600
East Central District:					
Anderson	20,000	1,045,600	29,600	1,100	72,200
Chase	9,600	501,900	15,000	600	39,300
Coffey	17,700	925,300	30,700	600	39,300
Douglas	24,100	1,259,900	32,200	1,000	65,600
Franklin	22,600	1,181,500	34,300	7,500	491,900
Geary	29,600	1,547,400	38,400	400	26,200
Johnson	10,600	554,100	18,900	500	32,800
Linn	29,900	1,563,100	45,500	200	13,100
Lyon	26,400	1,380,100	49,600	400	26,200
Miami	17,000	888,700	21,300	800	52,500
Morris	21,100	1,103,100	35,500	800	52,500
Osage	19,400	1,014,200	38,400	2,000	131,200
Shawnee	14,400	752,800	18,900	400	26,200
Wabaunsee	24,500	1,280,800	36,700	9,300	609,900
District total	286,900	14,998,500	445,000	25,600	1,678,900
Southeast District:					
Allen	15,000	751,200	23,600	800	54,200
Bourbon	18,000	901,400	27,200	600	40,700
Butler	39,000	1,953,100	53,200	2,000	135,600
Chautauqua	10,900	545,900	21,300	1,800	122,000
Cherokee	9,500	475,800	11,800	300	20,300
Cowley	48,000	2,403,700	59,200	5,000	338,900
Crawford	13,500	676,100	21,300	2,200	149,100
Elk	19,500	976,500	30,400	800	54,200
Greenwood	13,000	651,000	23,600	600	40,700
Labette	25,000	1,252,000	30,600	700	47,500
Montgomery	34,000	1,702,700	58,800	800	54,200
Neosho	28,400	1,422,200	47,300	700	47,500
Wilson	24,000	1,201,900	35,000	1,300	88,100
Woodson	8,800	440,700	15,700	900	61,000
District total	306,600	15,354,200	459,000	18,500	1,254,000
State	2,090,000	106,590,000	3,252,000	235,000	16,450,000

* Counties not shown separately but included in district and state totals.

HOGS AND SHEEP ON FARMS

County	Hogs and pigs December 1, 1980		Pig crop 1980	All sheep and lambs January 1, 1981	
	Number	Value, dollars	Number	Number	Value, dollars
Northwest District:					
Cheyenne	7,000	456,300	14,200	100	6,400
Decatur	13,800	899,500	22,200	600	38,200
Graham	5,200	339,000	10,200	400	25,500
Norton	10,000	651,800	22,200	2,200	140,200
Rawlins	10,000	651,800	20,500	2,300	146,500
Sheridan	16,000	1,043,000	21,400	1,900	121,000
Sherman	6,700	436,700	9,600	3,600	229,300
Thomas	7,300	475,800	13,700	2,000	127,400
District total	76,000	4,953,900	134,000	13,100	834,500
West Central District:					
Gove	12,000	794,900	19,900	2,000	126,200
Greeley	2,500	165,600	5,100	300	18,900
Lane	3,600	238,500	6,900	500	31,500
Logan	2,100	139,100	4,000	3,700	233,400
Ness	3,000	198,700	6,300	1,700	107,200
Scott	23,800	1,576,400	27,300	900	56,800
Trego	4,400	291,500	8,500	1,600	100,900
Wallace	3,600	238,500	8,000	3,100	195,500
Wichita	5,000	331,200	8,000	6,700	422,700
District total	60,000	3,974,400	94,000	20,500	1,293,100
Southwest District:					
Clark	800	52,900	1,100	200	12,000
Finney	5,600	370,000	8,000	700	42,100
Ford	19,100	1,261,800	33,600	600	36,100
Grant	7,100	469,000	13,700	500	30,000
Gray	9,700	640,800	12,500	3,600	216,200
Hamilton	2,700	178,400	4,600	200	12,000
Haskell	7,500	495,500	10,800	100	6,000
Hodgeman	3,000	198,200	4,000	100	6,000
Kearny	4,700	310,500	6,800	1,200	72,100
Meade	°	°	°	400	24,000
Morton	1000	66,100	1,100	100	6,000
Seward	°	°	°	400	24,000
Stanton	1,300	85,900	2,300	200	12,000
Stevens	3,300	218,000	5,700	100	6,000
District total	149,000	9,843,400	221,000	8,400	504,500
North Central District:					
Clay	45,000	2,861,900	79,400	1,100	66,800
Cloud	16,700	1,062,100	31,400	400	24,300
Jewell	57,500	3,656,800	94,200	3,400	206,600
Mitchell	26,900	1,710,800	50,200	3,000	182,300
Osborne	13,900	884,000	27,400	3,600	218,700
Ottawa	16,500	1,049,400	22,800	300	18,200
Phillips	36,400	2,314,900	66,800	400	24,300
Republic	33,900	2,155,900	56,600	7,300	443,400
Rooks	10,800	686,800	17,100	300	18,200
Smith	33,000	2,098,700	56,000	2,700	164,000
Washington	77,400	4,922,400	113,100	1,400	85,100
District total	368,000	23,403,700	615,000	23,900	1,451,900
Central District:					
Barton	13,300	874,000	26,700	1,500	95,400
Dickinson	25,100	1,649,400	46,700	4,000	254,500
Ellis	6,000	394,300	11,400	1000	63,600
Ellsworth	9,400	617,700	14,800	900	57,300
Lincoln	9,700	637,400	17,100	2,400	152,700
McPherson	25,600	1,682,200	37,600	6,400	407,100
Marion	31,200	2,050,000	55,000	2,300	146,300
Rice	22,200	1,458,800	30,000	4,100	260,800
Rush	2,000	131,400	2,300	1,200	76,300
Russell	6,400	420,600	9,700	1,200	76,300
Saline	18,100	1,189,400	30,700	1,300	82,700
District total	169,000	11,105,200	282,000	26,300	1,6[illegible]

HOGS AND SHEEP ON FARMS—*Concluded*

County	Hogs and pigs December 1, 1980		Pig crop 1980	All sheep and lambs January 1, 1981	
	Number	Value, dollars	Number	Number	Value, dollars
South Central District:					
Barber	3,800	252,400	9,100	3,400	215,900
Comanche	3,400	225,800	6,300	2,700	171,400
Edwards	2,900	192,600	4,000	1,400	88,900
Harper	7,300	484,800	12,500	2,400	152,400
Harvey	25,600	1,700,200	41,500	6,500	412,600
Kingman	11,700	777,100	17,600	3,300	209,500
Kiowa	8,600	571,200	18,800	900	57,200
Pawnee	10,700	710,700	19,300	2,200	139,700
Pratt	20,000	1,328,300	31,300	300	19,000
Reno	31,100	2,065,500	52,900	11,000	698,300
Sedgwick	36,700	2,437,500	50,100	21,700	1,377,500
Stafford	6,700	445,000	14,800	1,800	114,300
Sumner	20,500	1,361,500	35,800	5,000	317,400
District total	189,000	12,552,600	314,000	62,600	3,974,100
Northeast District:					
Atchison	30,600	1,994,600	58,000	300	18,400
Brown	43,100	2,809,400	66,000	2,100	129,100
Doniphan	25,400	1,655,600	38,800	1,000	61,500
Jackson	20,500	1,336,200	35,800	3,200	196,700
Jefferson	30,800	2,007,600	41,500	300	18,400
Leavenworth	14,200	925,600	18,800	500	30,700
Marshall	63,200	4,119,500	80,800	1,000	61,500
Nemaha	65,600	4,276,000	115,600	1,100	67,600
Pottawatomie	42,500	2,770,300	68,800	800	49,200
Riley	27,500	1,792,500	39,800	1,400	86,100
Wyandotte	600	39,100	1,1[illegible]	100	6,100
District total	364,000	23,726,400	565,000	11,800	725,300
East Central District:					
Anderson	16,000	1,037,300	27,900	1,200	72,600
Chase	9,800	635,300	13,700	300	18,200
Coffey	17,100	1,108,600	28,400	400	24,200
Douglas	20,800	1,348,500	30,700	1,300	78,700
Franklin	19,000	1,231,800	30,700	2,500	151,300
Geary	28,200	1,828,100	39,800	200	12,100
Johnson	9,600	622,400	18,800	400	24,200
Linn	24,000	1,555,900	44,300	200	12,100
Lyon	22,600	1,465,200	39,900	200	12,100
Miami	14,100	914,100	18,800	1,500	90,800
Morris	20,800	1,348,500	36,400	500	30,300
Osage	15,500	1,004,900	33,600	300	18,200
Shawnee	11,800	765,000	18,200	700	42,300
Wabaunsee	24,700	1,601,300	35,800	8,500	514,400
District total	254,000	16,466,900	417,000	18,200	1,101,500
Southeast District:					
Allen	12,000	773,700	22,200	1,300	80,500
Bourbon	15,900	1,025,200	26,100	400	24,800
Butler	39,300	2,533,900	48,300	1,900	117,700
Chautauqua	9,400	606,100	17,600	1,700	105,400
Cherokee	7,700	496,500	11,900	100	6,200
Cowley	33,600	2,166,500	55,100	4,100	254,100
Crawford	14,900	960,700	21,000	2,000	124,000
Elk	20,500	1,321,800	29,500	300	18,600
Greenwood	11,200	722,200	20,500	400	24,800
Labette	25,200	1,624,800	33,400	1,000	62,000
Montgomery	23,800	1,534,600	50,000	700	43,400
Neosho	30,300	1,953,700	45,500	400	24,800
Wilson	19,400	1,250,900	34,700	200	12,400
Woodson	7,800	502,900	14,200	700	43,400
District total	271,000	17,473,500	430,000	15,200	942,100
State	1,900,000	123,500,000	3,072,000	200,000	12,500,000

° Counties not shown separately but included in district and state totals.

VALUE OF PRODUCTION, 1979-80[1]

County	Cattle & Calves		Sheep & Lambs		Hogs & Pigs	
	1979	1980	1979	1980	1979	1980
			— Dollars —			
Northwest District:						
Cheyenne	9,566,400	6,682,200	9,000	3,700	1,817,300	1,318,600
Decatur	18,806,100	11,211,100	22,600	18,400	2,322,200	2,061,400
Graham	9,813,400	8,130,000	36,100	18,400	1,211,600	947,100
Norton	10,641,800	8,506,900	90,300	80,900	2,523,900	2,061,500
Rawlins	8,731,400	8,503,500	149,000	139,700	2,019,300	1,903,600
Sheridan	21,888,200	17,596,100	76,800	66,200	2,019,300	1,987,100
Sherman	13,667,900	11,207,300	149,000	110,300	908,700	891,400
Thomas	13,849,300	11,066,800	117,500	180,100	1,716,400	1,272,100
District Total	106,964,500	82,903,900	650,300	617,700	14,538,700	12,442,800
West Central District:						
Grove	24,761,600	21,801,200	113,200	46,900	1,609,100	1,877,800
Greeley	23,739,800	23,182,200	17,400	10,800	608,600	481,300
Lane	34,110,300	56,881,500	43,600	32,500	845,800	651,100
Logan	12,898,800	15,456,700	278,800	303,400	464,200	377,500
Ness	14,819,600	16,737,000	34,800	61,500	732,300	594,500
Scott	67,571,800	69,932,200	21,800	65,000	2,681,900	2,576,000
Trego	12,740,000	12,566,100	91,500	57,800	856,100	802,100
Wallace	9,020,200	6,117,200	226,500	220,300	938,600	754,900
Wichita	57,975,700	36,848,100	361,500	368,400	856,100	754,900
District Total	257,637,800	259,522,200	1,189,100	1,166,600	9,592,700	8,870,100
Southwest District:						
Clark	20,833,200	17,536,600	8,700	7,200	123,800	103,500
Finney	96,689,000	79,267,100	8,700	18,100	856,100	752,900
Ford	81,709,700	78,802,900	60,800	18,100	3,764,900	3,162,200
Grant	39,839,600	34,096,400	17,400	21,700	1,557,500	1,289,300
Gray	38,069,800	36,261,300	108,600	115,600	1,279,000	1,176,400
Hamilton	20,813,200	12,753,600	17,400	7,200	464,200	432,900
Haskell	57,409,800	59,290,400	4,400	3,600	1,093,400	1,016,400
Hodgeman	25,688,900	25,394,300	8,700	7,200	464,200	376,400
Kearny	23,018,100	22,361,600	86,900	79,400	732,300	640,000
Meade	16,977,300	13,330,800	30,400	36,100	5,487,500	5,082,000
Morton	10,249,300	9,357,800	4,400	3,600	123,800	103,500
Seward	38,308,900	29,810,400	4,400	3,600	6,095,900	5,910,300
Stanton	17,791,600	15,470,300	4,400	21,700	247,600	216,500
Stevens	11,271,600	10,466,600	4,400	3,600	608,600	536,400
District Total	498,670,000	444,200,100	369,600	346,700	22,898,800	20,798,700
North Central District:						
Clay	8,783,400	11,950,600	17,700	20,600	8,692,200	7,193,500
Cloud	9,494,000	6,750,600	26,600	31,000	3,454,700	2,844,800
Jewell	13,270,500	12,194,500	221,500	216,500	10,041,900	8,534,400
Mitchell	15,184,800	12,283,300	146,300	120,300	5,106,500	4,548,000
Osborne	12,509,700	13,028,400	159,600	116,900	2,739,600	2,482,400
Ottawa	11,535,200	12,903,700	26,600	27,500	2,266,200	2,065,600
Phillips	12,119,800	13,886,700	22,200	31,000	7,382,800	6,052,000
Republic	20,026,800	19,451,600	146,300	158,100	6,969,900	5,127,900
Rooks	9,253,800	12,105,700	8,800	34,400	1,782,800	1,549,200
Smith	16,234,700	14,693,900	97,500	55,000	6,778,500	5,073,500
Washington	16,633,900	20,549,500	93,100	151,300	12,066,300	10,246,600
District Total	145,046,600	149,798,500	966,200	962,600	67,281,400	55,717,900
Central District:						
Barton	29,587,800	27,802,100	98,800	73,800	2,826,000	2,499,400
Dickinson	24,263,800	23,337,700	143,700	126,500	4,587,300	4,371,600
Ellis	15,629,200	17,919,200	35,900	28,100	1,293,600	1,067,100
Ellsworth	8,575,500	8,302,600	22,500	17,600	1,651,800	1,385,400
Lincoln	10,709,500	11,944,900	179,600	105,400	1,880,700	1,600,700
McPherson	16,890,300	17,149,500	269,400	193,100	3,880,800	3,519,700
Marion	25,585,800	22,542,100	134,700	94,800	6,348,600	5,148,600
Rice	20,244,400	20,591,200	246,900	115,900	2,945,400	2,808,300
Rush	9,863,100	8,630,500	71,800	31,600	238,800	215,300
Russell	7,945,800	4,394,000	26,900	35,100	1,054,800	908,000
Saline	16,764,600	14,622,400	49,400	31,600	3,343,400	2,873,800
District Total	186,059,800	177,236,200	1,279,600	853,500	30,051,200	26,397,900

VALUE OF PRODUCTION, 1979-80[1]—*Concluded*

County	Cattle & Calves		Sheep & Lambs		Hogs & Pigs	
	1979	1980	1979	1980	1979	1980
			— Dollars —			
South Central District:						
Barber	24,457,700	18,980,500	103,800	133,100	1,067,600	861,000
Comanche	10,899,100	9,896,400	112,600	84,100	634,500	596,100
Edwards	13,758,400	12,224,400	64,900	31,500	362,600	378,500
Harper	13,846,400	16,626,900	112,600	87,600	1,188,500	1,182,700
Harvey	10,872,900	12,808,000	389,600	245,200	4,945,400	3,926,500
Kingman	11,494,800	12,479,800	168,900	105,100	1,873,400	1,665,200
Kiowa	9,976,100	10,217,000	47,600	35,000	2,145,400	1,778,700
Pawnee	15,810,200	14,280,400	43,300	56,000	1,631,700	1,826,000
Pratt	27,752,600	21,305,100	39,000	28,000	3,333,900	2,961,400
Reno	21,325,300	21,856,700	866,000	683,000	5,237,400	5,005,000
Sedgwick	13,819,200	15,519,200	870,300	605,900	5,005,800	4,740,100
Stafford	19,954,900	17,729,700	47,600	91,000	1,601,500	1,400,300
Sumner	12,931,000	12,366,300	216,500	157,600	4,411,600	3,387,200
District Total	206,898,600	196,290,400	3,082,700	2,343,100	33,439,300	29,708,700
Northeast District:						
Atchison	7,764,900	8,230,500	16,000	22,400	5,667,500	5,385,700
Brown	12,252,600	12,029,700	60,100	48,100	7,135,400	6,128,600
Doniphan	7,355,300	7,480,400	56,100	44,900	4,943,800	3,602,800
Jackson	11,425,700	12,724,700	120,300	86,500	3,975,400	3,324,300
Jefferson	9,722,300	10,953,500	12,000	16,000	4,097,800	3,853,600
Leavenworth	8,464,500	9,778,600	28,100	25,600	2,048,900	1,745,700
Marshall	16,501,500	16,424,300	44,100	51,300	7,838,700	7,502,800
Nemaha	18,431,100	20,146,800	60,100	38,500	12,313,700	10,734,300
Pottawatomie	19,650,000	19,731,600	64,100	48,100	7,349,500	6,388,500
Riley	8,506,400	8,248,200	52,100	32,000	4,342,400	3,695,700
Wyandotte	1,276,400	1,008,900	4,000	3,200	122,300	102,100
District Total	121,350,700	126,757,200	517,000	416,600	59,835,400	52,464,100
East Central District:						
Anderson	9,254,000	12,011,200	52,400	35,800	3,074,700	2,576,700
Chase	12,031,400	13,012,000	28,200	19,500	1,558,100	1,265,300
Coffey	10,000,400	11,932,000	20,200	19,500	3,189,000	2,622,900
Douglas	7,805,600	9,590,000	48,400	32,600	3,344,800	2,835,300
Franklin	10,609,900	11,388,900	121,000	244,100	3,562,900	2,835,300
Geary	4,098,700	4,963,000	12,100	13,000	3,988,800	3,675,700
Johnson	4,970,500	5,923,400	16,100	16,300	1,963,300	1,736,300
Linn	7,726,300	9,322,200	8,100	6,500	4,726,300	4,091,200
Lyon	27,104,300	27,522,700	20,200	13,000	5,152,300	3,685,000
Miami	10,520,100	12,333,900	40,300	26,000	2,212,600	1,736,300
Morris	17,110,500	17,683,300	12,100	26,000	3,687,600	3,361,700
Osage	9,815,600	8,959,300	108,900	65,100	3,988,800	3,103,100
Shawnee	5,094,400	6,042,300	16,100	13,000	1,963,300	1,680,900
Wabaunsee	13,023,000	16,089,200	290,400	302,600	3,812,200	3,306,300
District Total	149,164,700	166,773,400	794,500	833,000	46,224,700	38,512,000
Southeast District:						
Allen	7,282,300	9,402,900	38,000	26,900	2,348,400	2,039,100
Bourbon	17,766,100	19,793,500	21,100	20,200	2,706,600	2,397,400
Butler	37,745,100	29,998,500	113,900	67,300	5,293,800	4,436,500
Chautauqua	9,893,000	10,431,500	54,900	60,500	2,119,500	1,616,600
Cherokee	5,317,200	6,799,200	4,200	10,100	1,174,200	1,093,100
Cowley	21,842,000	25,032,100	160,300	168,100	5,890,700	5,061,000
Crawford	8,888,900	10,818,700	54,900	73,900	2,119,500	1,928,900
Elk	10,660,600	10,092,400	33,800	26,900	3,025,000	2,709,700
Greenwood	20,358,800	22,893,600	25,300	20,200	2,348,400	1,883,000
Labette	22,501,100	19,595,500	21,100	23,600	3,044,900	3,067,900
Montgomery	9,367,200	8,578,100	42,200	26,900	5,851,000	4,592,700
Neosho	9,173,800	12,388,400	21,100	23,600	4,706,700	4,179,300
Wilson	9,165,800	10,435,600	42,200	43,700	3,482,800	3,187,300
Woodson	11,637,400	12,113,100	38,000	30,300	1,562,300	1,304,300
District Total	201,599,300	208,373,100	671,000	622,200	45,673,800	39,496,800
State	1,873,392,000	1,811,855,000	9,520,000	8,162,000	329,536,000	284,409,000

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1. Value represents weighted monthly prices received by farmers applied to production of livestock; not an inventory value.

DAIRY AND POULTRY PRODUCTION

BY CHARLES L. RUCKMAN AND G. ERIC WALDHAUS

MILK CASH RECEIPTS 11 PERCENT HIGHER

A turn-around in milk production during 1980, coupled with higher prices received for milk sold to plants and dealers, led to record high cash receipts from milk and cream marketings. Cash receipts reached nearly $175 million, 11 percent greater than the previous year. Milk production totaled 1,355 million pounds during 1980, a 2 percent increase from 1979 and a reversal of production declines since 1977. Production per cow averaged 11,016 pounds for the year, the highest yearly total on record. Milk cow numbers held steady with the previous year averaging 123,000 head. The number of milk cow farms in Kansas numbered 6,200 for 1980. Ninety-seven percent of all milk produced was sold to plants and dealers of which 83 percent was fluid grade. The farm value of milk produced totaled $178.3 million. Sedgwick county ranked first in value of milk produced with $11.2 million followed by Nemaha with $9.6 million. Milk sold to plants and dealers averaged $13.16 per cwt. in 1980, up $1.11 from 1979. The milk-feed price ratio averaged 1.50, down slightly from the previous year.

BUTTER AND CHEESE PRODUCTION REBOUND

Butter production rose to 16.4 million pounds during 1980, a 38 percent increase from 1979 and the highest annual production since 1968. American cheese production totaled 25.1 million pounds, 21 percent above 1979. Total natural cheese production, at 30.6 million pounds, was up 31 percent from 1979 and the highest annual production since 1976. Cottage cheese production, at 21.8 million pounds, was off 6 percent from 1979 and was the smallest production since 1974. Frozen products, including ice cream, ice milk and milk sherbet, increased 20 percent from 1979. Ice cream production, at 7.7 million gallons, was at the highest level since 1974 and 22 percent above 1979 production. Ice milk production, at 5.8 million gallons, was at a record high level and 17 percent above 1979. Milk sherbet production, at .6 million gallons, was up 23 percent and the highest since 1974.

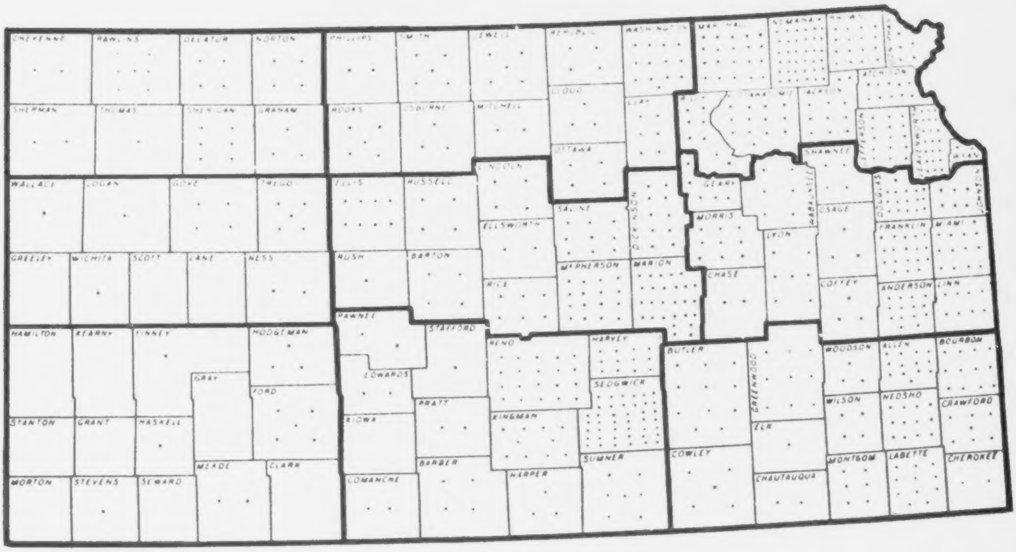
POULTRY INVENTORY CONTINUES DECLINE

The number of chickens on December 1, 1980, at 2,140,000, was 13 percent fewer than the previous year and continued the downward trend started in 1944. Hens and pullets of laying age were down 9 percent from 1979. The average value per bird, at $1.60, was down from $1.75 the previous year. Egg production during 1980 totaled 427 million eggs, down 12 percent from the previous year and the lowest yearly production on record. Chickens produced during 1980 were down 17 percent from the previous year. The value of chickens produced, at $1,251,000, was 23 percent below 1979. Value of egg production totaled $15.8 million in 1980, down 20 percent from a year earlier. Reno and McPherson were leading counties in value of egg production with $1.8 million and $1.5 million, respectively.

Eleven commercial hatcheries in Kansas produced 2,879,000 egg-type chicks during 1980, 24 percent less than 1979 production. Kansas turkey growers raised 132,000 birds in 1980, down 28 percent from 1979. Income from turkeys produced in 1980 grossed $1,214,000, a 25 percent decline from 1979.

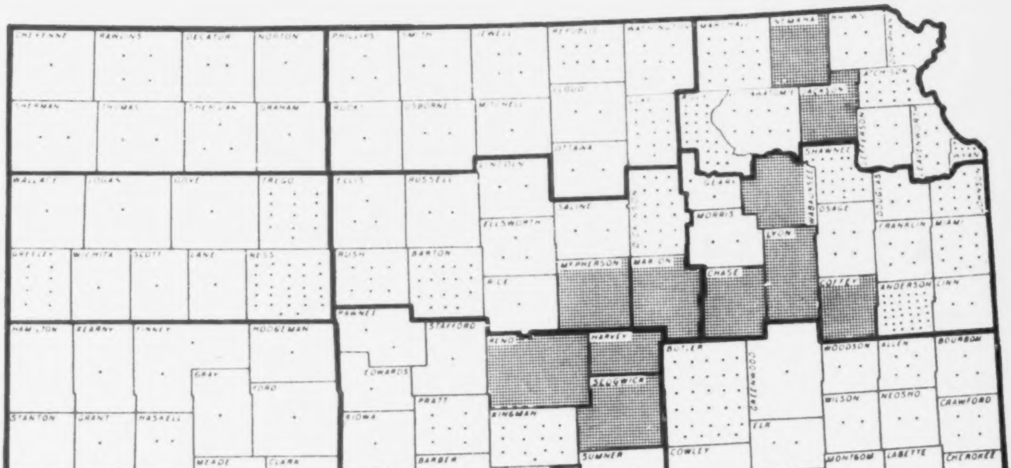
MILK PRODUCTION, 1980

1 Dot=2,000,000 lbs.


CHEYENNE
RAWLINS
DECATUR
NORTON
PHILLIPS
SMITH
JEWELL
REPUBLIC
WASHINGTON
MARSHALL
NEMAHA
BROWN
DONIPHAN
SHERMAN
THOMAS
SHERIDAN
GRAHAM
ROOKS
OSBORNE
MITCHELL
CLOUD
CLAY
RILEY
POTTAWATOMIE
JACKSON
ATCHISON
JEFFERSON
LEAVENWORTH
WYANDOTTE
OTTAWA
SHAWNEE
WALLACE
LOGAN
GOVE
TREGO
ELLIS
RUSSELL
LINCOLN
SALINE
DICKINSON
GEARY
WABAUNSEE
DOUGLAS
JOHNSON
MORRIS
OSAGE
ELLSWORTH
LYON
FRANKLIN
MIAMI
GREELEY
WICHITA
SCOTT
LANE
NESS
RUSH
BARTON
McPHERSON
MARION
CHASE
COFFEY
ANDERSON
LINN
RICE
HAMILTON
KEARNY
FINNEY
HODGEMAN
PAWNEE
STAFFORD
RENO
HARVEY
BUTLER
GREENWOOD
WOODSON
ALLEN
BOURBON
GRAY
EDWARDS
SEDGWICK
FORD
PRATT
WILSON
NEOSHO
CRAWFORD
STANTON
GRANT
HASKELL
KIOWA
KINGMAN
ELK
MORTON
STEVENS
SEWARD
MEADE
CLARK
COMANCHE
BARBER
HARPER
SUMNER
COWLEY
CHAUTAUQUA
MONTGOMERY
LABETTE
CHEROKEE

EGG PRODUCTION, 1980

1 Dot=250,000 eggs
▦ =10,000,000 or more eggs


CHEYENNE
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SHERMAN
THOMAS
SHERIDAN
GRAHAM
ROOKS
OSBORNE
MITCHELL
CLOUD
CLAY
POTTAWATOMIE
JACKSON
ATCHISON
JEFFERSON
LEAVENWORTH
WYANDOTTE
OTTAWA
SHAWNEE
WALLACE
LOGAN
GOVE
TREGO
ELLIS
RUSSELL
LINCOLN
SALINE
GEARY
WABAUNSEE
DOUGLAS
JOHNSON
MORRIS
OSAGE
ELLSWORTH
LYON
FRANKLIN
MIAMI
GREELEY
WICHITA
SCOTT
LANE
NESS
RUSH
BARTON
McPHERSON
MARION
CHASE
COFFEY
ANDERSON
LINN
RICE
HAMILTON
KEARNY
FINNEY
HODGEMAN
PAWNEE
STAFFORD
RENO
HARVEY
BUTLER
GREENWOOD
WOODSON
ALLEN
BOURBON
GRAY
EDWARDS
SEDGWICK
FORD
PRATT
WILSON
NEOSHO
CRAWFORD
STANTON
GRANT
HASKELL
KIOWA
KINGMAN
ELK
MORTON
STEVENS
SEWARD
MEADE
CLARK
COMANCHE
BARBER
HARPER
SUMNER
COWLEY
CHAUTAUQUA
MONTGOMERY
LABETTE
CHEROKEE

MILK COWS, MILK PRODUCTION AND VALUE, 1979-80

County	1979			1980		
	Milk Cows,[1] Number	Pounds Produced (000)	Farm Value, Dollars	Milk Cows,[1] Number	Pounds Produced (000)	Farm Value, Dollars
Northwest District:						
Cheyenne	525	5,200	622,300	500	4,900	640,800
Decatur	850	8,300	993,300	825	8,100	1,059,400
Graham	575	5,600	670,200	600	5,900	771,600
Norton	950	9,300	1,112,900	900	8,900	1,164,000
Rawlins	1,375	13,600	1,627,500	1,475	14,700	1,922,500
Sheridan	1,100	10,800	1,292,500	1,225	12,100	1,582,500
Sherman	300	2,900	347,000	325	3,200	418,500
Thomas	225	2,200	263,300	200	2,000	261,600
District Total	5,900	57,900	6,929,000	6,050	59,800	7,820,900
West Central District:						
Gove	750	8,700	1,041,300	775	8,200	1,072,400
Greeley	50	500	59,800	50	500	65,400
Lane	50	500	59,800	50	500	65,400
Logan	250	2,300	275,200	250	2,600	340,000
Ness	425	3,800	454,700	425	4,400	575,500
Scott	50	500	59,800	50	500	65,400
Trego	825	7,500	897,600	850	9,000	1,177,100
Wallace	250	2,300	275,200	250	2,600	340,000
Wichita	100	900	107,700	100	1,000	130,800
District Total	2,750	27,000	3,231,100	2,800	29,300	3,832,000
Southwest District:						
Clark	50	600	73,000	50	600	79,700
Finney	100	1,100	133,800	100	1,100	146,100
Ford	825	9,000	1,095,100	850	9,300	1,234,700
Grant	50	600	73,000	50	600	79,700
Gray	50	600	73,000	50	600	79,700
Hamilton	50	600	73,000	50	600	79,700
Haskell	100	1,100	133,800	100	1,100	146,100
Hodgeman	625	6,900	839,500	625	6,900	916,100
Kearny	50	600	73,000	50	600	79,700
Meade	400	4,400	535,300	425	4,800	637,200
Morton	50	600	73,000	50	600	79,700
Seward	50	600	73,000	50	600	79,700
Stanton	50	600	73,000	50	600	79,700
Stevens	100	1,100	133,800	100	1,100	146,100
District Total	2,550	28,400	3,455,300	2,600	29,100	3,863,900
North Central District:						
Clay	1,050	11,200	1,340,300	1,050	11,500	1,504,000
Cloud	550	5,800	694,100	500	5,300	693,200
Jewell	950	9,900	1,184,700	900	9,000	1,177,100
Mitchell	325	3,700	442,800	300	3,300	431,600
Osborne	575	6,100	730,000	550	5,600	732,400
Ottawa	675	7,700	921,500	675	7,000	915,500
Phillips	475	5,000	598,400	450	4,500	588,500
Republic	950	10,100	1,208,700	850	8,700	1,137,800
Rooks	1,225	12,700	1,519,800	1,100	10,700	1,399,400
Smith	975	10,200	1,220,600	1,025	9,900	1,294,800
Washington	2,700	28,600	3,422,600	2,600	26,300	3,439,600
District Total	10,450	111,000	13,283,500	10,000	101,800	13,313,900
Central District:						
Barton	825	8,800	1,053,100	725	7,300	954,700
Dickinson	1,825	19,500	2,333,600	1,825	20,100	2,628,800
Ellis	1,250	16,900	2,022,400	1,275	16,900	2,210,300
Ellsworth	275	3,400	406,900	350	3,500	457,700
Lincoln	850	9,300	1,112,900	850	8,500	1,111,700
McPherson	2,975	30,500	3,650,000	2,900	31,100	4,067,400
Marion	4,950	52,900	6,330,700	4,750	54,900	7,180,100
Rice	1,250	13,700	1,639,500	1,175	11,900	1,556,300
Rush	200	2,200	263,300	200	2,200	287,700
Russell	850	9,300	1,112,900	875	8,800	1,150,900
Saline	1,800	19,700	2,357,500	1,675	18,800	2,458,800
District Total	17,050	186,200	22,282,800	16,600	184,000	24,064,400

MILK COWS, MILK PRODUCTION AND VALUE, 1979-80—*Concluded*

County	1979			1980		
	Milk Cows,[1] Number	Pounds Produced (000)	Farm Value, Dollars	Milk Cows,[1] Number	Pounds Produced (000)	Farm Value, Dollars
South Central District:						
Barber	925	10,400	1,265,300	850	8,500	1,128,600
Comanche	325	3,600	438,000	300	3,100	411,600
Edwards	425	4,800	584,000	400	4,000	531,100
Harper	725	9,000	1,095,000	650	6,800	902,900
Harvey	2,425	26,700	3,248,500	2,275	24,300	3,226,600
Kingman	2,075	23,000	2,798,300	1,975	20,300	2,695,500
Kiowa	50	600	73,000	50	500	66,400
Pawnee	275	3,100	377,200	300	3,000	398,300
Pratt	525	5,900	717,800	475	4,900	650,600
Reno	3,900	42,800	5,207,300	3,950	40,000	5,311,300
Sedgwick	7,250	82,000	9,976,600	7,550	84,500	11,220,200
Stafford	250	2,800	340,700	250	2,900	385,100
Sumner	1,150	13,100	1,593,800	1,125	13,100	1,739,400
District Total	20,300	227,800	27,715,500	20,150	215,900	28,667,600
Northeast District:						
Atchison	1,750	18,100	2,166,000	1,675	19,400	2,537,200
Brown	2,425	29,000	3,470,500	2,525	32,400	4,237,400
Doniphan	900	9,100	1,089,000	925	9,700	1,268,600
Jackson	2,225	22,500	2,692,600	2,000	22,200	2,903,400
Jefferson	2,650	26,800	3,207,200	2,725	29,600	3,871,200
Leavenworth	4,150	42,000	5,026,200	3,825	42,300	5,532,200
Marshall	3,400	34,600	4,140,600	3,450	39,000	5,100,600
Nemaha	5,625	66,000	7,898,300	5,800	73,500	9,612,900
Pottawatomie	2,350	23,000	2,752,400	2,375	25,500	3,335,000
Riley	1,450	14,800	1,771,100	1,500	16,600	2,171,000
Wyandotte	275	2,800	335,100	250	3,400	444,700
District Total	27,200	288,700	34,549,000	27,050	313,600	41,014,200
East Central District:						
Anderson	2,275	24,400	2,944,300	2,475	27,400	3,610,900
Chase	250	2,900	349,900	250	3,100	408,500
Coffey	550	6,000	724,000	500	6,100	803,900
Douglas	2,675	31,100	3,752,800	2,675	32,900	4,335,700
Franklin	2,950	32,300	3,897,800	3,100	36,200	4,770,400
Geary	800	9,300	1,122,200	825	10,100	1,331,000
Johnson	825	10,000	1,206,700	875	11,500	1,515,500
Linn	1,400	15,000	1,810,000	1,300	15,000	1,976,800
Lyon	1,225	13,200	1,592,800	1,150	13,100	1,726,400
Miami	2,325	25,000	3,016,700	2,225	25,600	3,373,700
Morris	1,625	18,000	2,172,000	1,600	18,700	2,464,400
Osage	575	6,700	808,500	575	6,800	896,100
Shawnee	750	7,700	929,100	725	8,500	1,120,200
Wabaunsee	1,075	11,500	1,387,700	1,025	11,800	1,555,000
District Total	19,300	213,100	25,714,500	19,300	226,800	29,888,500
Southeast District:						
Allen	2,450	25,500	3,102,600	2,375	25,000	3,319,600
Bourbon	2,075	22,000	2,676,600	2,150	23,500	3,120,400
Butler	1,575	19,900	2,421,100	1,475	22,300	2,961,000
Chautauqua	425	4,700	571,800	425	4,500	597,500
Cherokee	425	4,700	571,800	375	4,000	531,100
Cowley	900	9,900	1,204,500	975	10,100	1,341,100
Crawford	1,175	12,900	1,569,500	1,300	13,800	1,832,400
Elk	150	1,700	206,800	150	1,700	225,700
Greenwood	1,050	15,600	1,898,000	1,200	18,200	2,416,600
Labette	2,100	22,500	2,737,500	1,900	21,600	2,868,100
Montgomery	1,300	14,300	1,739,800	1,175	12,400	1,646,500
Neosho	2,175	23,000	2,798,300	2,200	24,100	3,200,000
Wilson	775	8,500	1,034,200	725	7,800	1,035,700
Woodson	425	4,700	571,800	525	5,700	756,900
District Total	17,000	189,900	23,104,300	16,950	194,700	25,852,600
State	122,500	1,330,000	160,265,000	121,500	1,355,000	178,318,000

1. Average number during year

CHICKENS ON FARMS

County	Chickens[1] December 1, 1979		Chickens[1] December 1, 1980	
	Number	Value, dollars	Number	Value, dollars
Northwest District:				
Cheyenne	1,500	2,600	1,000	1,600
Decatur	2,500	4,400	1,500	2,400
Graham	1,500	2,600	1,000	1,600
Norton	2,000	3,500	1,500	2,400
Rawlins	5,500	9,600	2,500	4,000
Sheridan	4,000	7,000	3,000	4,800
Sherman	2,500	4,400	1,500	2,400
Thomas	2,500	4,400	1,000	1,600
District total	22,000	38,500	13,000	20,800
West Central District:				
Gove	2,000	3,500	1,000	1,600
Greeley	10,000	17,500	10,000	16,000
Lane	2,000	3,500	2,000	3,200
Logan	1,000	1,800	1,000	1,600
Ness	44,000	77,000	2,000	3,200
Scott	1,000	1,800	1,000	1,600
Trego	18,000	31,500	2,000	3,200
Wallace	1,000	1,700	1,000	1,600
Wichita	1,000	1,700	1,000	1,600
District total	80,000	140,000	21,000	33,600
Southwest District:				
Clark	500	900	500	800
Finney	3,500	6,100	2,000	3,200
Ford	2,000	3,500	1,000	1,600
Grant	1,000	1,800	1,000	1,600
Gray	1,000	1,700	1,000	1,600
Hamilton	500	900	500	800
Haskell	2,500	4,400	1,000	1,600
Hodgeman	2,000	3,500	1,000	1,600
Kearny	1,000	1,700	1,000	1,600
Meade	1,000	1,700	1,000	1,600
Morton	500	900	500	800
Seward	500	900	500	800
Stanton	500	900	500	800
Stevens	500	900	500	800
District total	17,000	29,800	12,000	19,200
North Central District:				
Clay	6,000	10,500	83,000	132,800
Cloud	2,500	4,400	2,000	3,200
Jewell	6,500	11,400	3,500	5,600
Mitchell	1,500	2,600	1,500	2,400
Osborne	3,000	5,300	2,500	4,000
Ottawa	3,000	5,200	2,500	4,000
Phillips	4,000	7,000	2,500	4,000
Republic	15,500	27,100	2,000	3,200
Rooks	2,000	3,500	2,000	3,200
Smith	3,000	5,200	2,500	4,000
Washington	10,000	17,500	5,000	8,000
District total	57,000	99,700	109,000	174,400
Central District:				
Barton	18,000	31,500	32,000	51,200
Dickinson	26,000	45,500	17,000	27,200
Ellis	4,500	7,900	2,000	3,200
Ellsworth	4,500	7,900	3,000	4,800
Lincoln	3,500	6,100	2,000	3,200
McPherson	184,000	322,000	225,000	360,000
Marion	165,000	288,700	175,000	280,000
Rice	2,000	3,500	2,000	3,200
Rush	10,000	17,500	8,000	12,800
Russell	3,500	6,100	2,000	3,200
Saline	3,000	5,300	2,000	3,200
District total	424,000	742,000	470,000	752,000

CHICKENS ON FARMS—*Concluded*

County	Chickens[1] December 1, 1979		Chickens[1] December 1, 1980	
	Number	Value, dollars	Number	Value, dollars
South Central District:				
Barber	1,000	1,800	5,000	8,000
Comanche	1,000	1,800	1,000	1,600
Edwards	2,000	3,500	1,000	1,600
Harper	135,000	236,200	133,000	212,800
Harvey	110,000	192,500	98,000	156,800
Kingman	15,000	26,200	15,000	24,000
Kiowa	1,000	1,800	1,000	1,600
Pawnee	3,000	5,200	1,000	1,600
Pratt	24,000	42,000	5,000	8,000
Reno	348,000	609,000	363,000	580,800
Sedgwick	250,000	438,000	151,000	241,600
Stafford	2,000	3,500	1,000	1,600
Sumner	10,000	17,500	3,000	4,800
District total	902,000	1,579,000	778,000	1,244,800
Northeast District:				
Atchison	17,000	29,800	2,000	3,200
Brown	5,500	9,600	3,500	5,600
Doniphan	4,000	7,000	2,500	4,000
Jackson	75,000	131,200	54,000	86,400
Jefferson	5,500	9,600	3,500	5,600
Leavenworth	9,000	15,800	5,000	8,000
Marshall	26,000	45,500	9,000	14,400
Nemaha	82,000	143,500	36,000	57,600
Pottawatomie	12,000	21,000	6,500	10,400
Riley	19,000	33,200	32,000	51,200
Wyandotte	7,000	12,300	4,000	6,400
District total	262,000	458,500	158,000	252,800
East Central District:				
Anderson	47,000	82,200	40,000	64,000
Chase	75,000	131,200	32,000	51,200
Coffey	70,000	122,500	68,000	108,800
Douglas	4,500	7,900	3,000	4,800
Franklin	7,500	13,100	4,000	6,400
Geary	3,000	5,300	2,500	4,000
Johnson	14,000	24,500	7,500	12,000
Linn	2,500	4,400	2,000	3,200
Lyon	145,000	253,700	90,000	144,000
Miami	15,000	26,300	15,000	24,000
Morris	3,000	5,300	2,500	4,000
Osage	5,500	9,600	3,500	5,600
Shawnee	29,000	50,800	25,000	40,000
Wabaunsee	195,000	341,200	230,000	368,000
District total	616,000	1,078,000	525,000	840,000
Southeast District:				
Allen	7,500	13,100	4,000	6,400
Bourbon	4,500	7,900	3,000	4,800
Butler	42,000	73,500	20,500	32,800
Chautauqua	2,500	4,400	2,000	3,200
Cherokee	3,500	6,100	2,000	3,200
Cowley	3,000	5,200	2,500	4,000
Crawford	5,500	9,600	3,500	5,600
Elk	2,500	4,400	2,000	3,200
Greenwood	2,000	3,500	2,000	3,200
Labette	3,500	6,100	2,000	3,200
Montgomery	4,500	7,900	3,000	4,800
Neosho	3,500	6,100	3,000	4,800
Wilson	3,000	5,300	2,500	4,000
Woodson	2,500	4,400	2,000	3,200
District total	90,000	157,500	54,000	86,400
State	2,470,000	4,323,000	2,140,000	3,424,000

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[1] Excludes broilers

LAYERS, EGG PRODUCTION AND VALUE, 1979-80

County	1979			1980		
	Layers,[1] Number	Eggs Produced (000)	Farm Value, Dollars	Layers,[1] Number	Eggs Produced (000)	Farm Value, Dollars
Northwest District:						
Cheyenne	2,000	450	17,300	1,200	270	10,000
Decatur	3,000	675	26,000	1,900	427	15,800
Graham	1,700	382	14,700	1,200	270	10,000
Norton	2,200	495	19,100	1,500	337	12,400
Rawlins	5,700	1,283	49,400	4,200	944	34,800
Sheridan	4,800	1,080	41,600	3,100	696	25,700
Sherman	2,400	540	20,800	1,900	427	15,800
Thomas	1,200	270	10,400	1,900	427	15,800
District total	23,000	5,175	199,300	16,900	3,798	140,300
West Central District:						
Gove	1,700	382	14,700	1,500	337	12,500
Greeley	10,600	2,385	91,800	9,000	2,022	74,700
Lane	2,600	585	22,500	1,500	337	12,500
Logan	1,600	360	13,900	800	180	6,600
Ness	50,100	11,272	434,000	30,000	6,742	248,900
Scott	1,000	225	8,700	800	180	6,600
Trego	15,000	3,375	130,000	14,000	3,146	116,200
Wallace	700	158	6,100	800	180	6,600
Wichita	700	158	6,100	800	180	6,600
District Total	84,000	18,900	727,800	59,200	13,304	491,200
Southwest District:						
Clark	500	112	4,300	400	90	3,300
Finney	3,800	855	32,900	2,700	606	22,400
Ford	1,200	270	10,400	1,500	337	12,400
Grant	800	180	6,900	800	180	6,700
Gray	900	202	7,800	800	180	6,700
Hamilton	700	158	6,100	400	90	3,300
Haskell	2,400	540	20,800	1,900	427	15,800
Hodgeman	2,000	450	17,300	1,500	337	12,400
Kearny	900	202	7,800	800	180	6,700
Meade	800	180	6,900	800	180	6,700
Morton	400	90	3,500	400	90	3,300
Seward	300	68	2,600	400	90	3,300
Stanton	600	135	5,200	400	90	3,300
Stevens	700	158	6,100	400	90	3,300
District Total	16,000	3,600	138,600	13,200	2,967	109,600
North Central District:						
Clay	122,400	27,540	1,083,000	15,000	3,371	124,400
Cloud	2,700	608	23,900	1,900	427	15,800
Jewell	5,900	1,328	52,200	5,000	1,123	41,500
Mitchell	1,700	382	15,000	1,200	270	10,000
Osborne	3,000	675	26,500	2,300	517	19,100
Ottawa	3,100	698	27,400	2,300	517	19,100
Phillips	4,200	945	37,200	3,100	697	25,700
Republic	11,400	2,565	100,900	9,000	2,023	74,700
Rooks	1,700	382	15,000	1,500	337	12,400
Smith	3,400	765	30,100	2,300	517	19,100
Washington	10,500	2,362	92,900	7,700	1,730	63,900
District Total	170,000	38,250	1,504,100	51,300	11,529	425,700
Central District:						
Barton	7,600	1,710	67,100	20,000	4,495	165,900
Dickinson	22,300	5,018	196,900	20,000	4,495	165,900
Ellis	4,100	922	36,200	3,500	786	29,000
Ellsworth	4,400	990	38,900	3,500	787	29,100
Lincoln	2,800	630	24,700	2,700	607	22,400
McPherson	136,400	30,690	1,204,300	185,000	41,576	1,534,900
Marion	128,100	28,822	1,131,000	165,000	37,082	1,369,000
Rice	2,700	608	23,900	1,500	337	12,400
Rush	12,100	2,722	106,800	7,700	1,730	63,900
Russell	3,500	788	30,900	2,700	607	22,400
Saline	3,000	675	26,500	2,300	517	19,100
District Total	327,000	73,575	2,887,200	413,900	93,019	3,434,000

LAYERS, EGG PRODUCTION AND VALUE, 1979-80—*Concluded*

County	1979			1980		
	Layers,[1] Number	Eggs Produced (000)	Farm Value, Dollars	Layers,[1] Number	Eggs Produced (000)	Farm Value, Dollars
South Central District:						
Barber	1,000	227	8,900	1,500	337	12,400
Comanche	1,300	296	11,600	800	180	6,700
Edwards	2,100	477	18,800	1,500	337	12,400
Harper	157,600	35,830	1,408,900	109,000	24,496	904,300
Harvey	101,300	23,031	905,600	97,000	21,800	804,800
Kingman	12,600	2,865	112,700	14,000	3,146	116,100
Kiowa	700	159	6,300	800	180	6,700
Pawnee	1,600	364	14,300	2,300	517	19,100
Pratt	24,400	5,547	218,100	8,000	1,798	66,400
Reno	185,900	42,265	1,662,000	214,700	48,251	1,781,300
Sedgwick	137,000	31,147	1,224,800	135,000	30,340	1,120,100
Stafford	1,600	364	14,300	1,500	337	12,400
Sumner	10,900	2,478	97,400	7,700	1,730	63,900
District Total	638,000	145,050	5,703,700	593,800	133,449	4,926,600
Northeast District:						
Atchison	16,700	3,757	154,400	13,100	2,944	108,700
Brown	4,200	945	38,800	4,200	944	34,900
Doniphan	4,300	968	39,800	3,100	697	25,700
Jackson	83,000	18,675	767,700	57,700	12,967	478,700
Jefferson	5,700	1,282	52,700	4,200	944	34,900
Leavenworth	9,300	2,092	86,000	6,900	1,551	57,200
Marshall	26,600	5,985	246,000	17,500	3,933	145,200
Nemaha	76,200	17,145	704,800	59,000	13,259	489,500
Pottawatomie	14,600	3,285	135,000	9,200	2,067	76,300
Riley	10,700	2,408	99,000	25,000	5,618	207,400
Wyandotte	8,700	1,958	80,500	5,400	1,214	44,800
District Total	260,000	58,500	2,404,700	205,300	46,138	1,703,300
East Central District:						
Anderson	58,000	13,050	581,900	38,000	8,540	315,300
Chase	68,000	15,300	682,300	58,000	13,035	481,200
Coffey	56,300	12,668	564,900	54,000	12,136	448,000
Douglas	4,700	1,058	47,200	3,500	787	29,000
Franklin	5,300	1,192	53,100	5,800	1,303	48,100
Geary	2,200	495	22,100	2,300	517	19,100
Johnson	12,900	2,902	129,400	10,800	2,427	89,600
Linn	2,500	562	25,100	1,900	427	15,800
Lyon	114,700	25,807	1,150,800	112,000	25,170	929,200
Miami	15,100	3,398	151,500	12,000	2,697	99,600
Morris	3,400	765	34,100	2,300	517	19,100
Osage	4,300	968	43,200	4,200	944	34,800
Shawnee	35,900	8,078	360,200	22,300	5,012	185,000
Wabaunsee	158,700	35,707	1,592,300	150,000	33,710	1,244,500
District Total	542,000	121,950	5,438,100	477,100	107,222	3,958,300
Southeast District:						
Allen	6,100	1,373	54,900	5,800	1,303	48,100
Bourbon	4,000	900	36,000	3,500	786	29,000
Butler	35,100	7,898	315,700	32,400	7,281	268,800
Chautauqua	1,900	428	17,100	1,900	427	15,800
Cherokee	3,200	720	28,800	2,700	607	22,400
Cowley	3,300	742	29,600	2,300	517	19,100
Crawford	5,000	1,125	45,000	4,200	944	34,800
Elk	2,000	450	18,000	1,900	427	15,800
Greenwood	2,600	585	23,400	1,500	337	12,400
Labette	3,300	742	29,600	2,700	607	22,400
Montgomery	4,000	900	36,000	3,500	787	29,100
Neosho	3,700	832	33,200	2,700	607	22,400
Wilson	3,800	855	34,200	2,300	517	19,100
Woodson	2,000	450	18,000	1,900	427	15,800
District Total	80,000	18,000	719,500	69,300	15,574	575,000
State	2,140,000	483,000	19,723,000	1,900,000	427,000	15,764,000

[1] Hens and pullets of laying age at beginning of year.

MILK COWS AND MILK PRODUCED, 1979-80

Month	Milk Cows[1]		Milk Per Cow		Milk Production	
	1979	1980	1979	1980	1979	1980
	(000)		Pounds		Million Pounds	
January	125	121	875	870	109	105
February	124	122	775	810	96	99
March	124	122	880	910	109	111
April	124	122	910	945	113	115
May	124	122	965	980	120	120
June	124	123	945	960	117	118
July	124	123	940	950	117	117
August	123	123	925	940	114	116
September	122	123	900	915	110	113
October	122	123	915	935	112	115
November	121	123	885	915	107	113
December	120	123	880	920	106	113
Annual Average or Total	123	123	10,813[2]	11,016[2]	1,330	1,355

1. Includes dry cows. Excludes heifers not yet fresh.
2. Pounds of milk per cow for the year.

DAIRY PRODUCTS MANUFACTURED, 1973-80

Year	Number of plants*	Creamery butter (000 lbs.)	American cheese (000 lbs.)	Ice cream (000 gal.)	Ice milk (000 gal.)	Cottage cheese (000 lbs.)
1973	44	13,539	32,619	7,890	4,934	24,498
1974	38	13,897	37,303	8,844	4,936	21,029
1975	34	12,478	27,493	7,563	4,213	23,319
1976	31	14,815	29,945	7,583	3,595	24,429
1977	30	16,154	26,448	7,325	4,509	22,827
1978	30	13,103	23,683	5,969	5,450	23,294
1979	30	11,862	20,675	6,340	4,926	23,173
1980	27	16,351	25,116	7,714	5,773	21,825

* Excluding counter freezers.

LAYERS ON HAND AND EGGS PRODUCED, 1979-80

Month	Layers on Hand During Month		Eggs per 100 Layers		Eggs Produced	
	1979	1980	1979	1980	1979	1980
	(000)		Number		Millions	
December[1]	2,165	1,900	1,975	1,947	43	37
January	2,160	1,910	1,978	1,990	43	38
February	2,073	1,938	1,772	1,909	37	37
March	2,008	1,878	2,055	2,130	41	40
April	1,963	1,845	2,046	2,060	40	38
May	1,918	1,819	2,139	2,089	41	38
June	1,971	1,743	2,046	1,951	40	34
July	2,010	1,725	2,062	1,739	41	30
August	2,025	1,716	2,040	1,865	41	32
September	2,070	1,772	1,902	1,919	39	34
October	2,028	1,801	1,959	1,999	40	36
November	1,938	1,754	1,917	1,881	37	33
Annual Average or Total	2,027	1,876	238[2]	228[2]	483	427

1. Preceding year.
2. Eggs per layer for the year.

HATCHERY PRODUCTION, 1973-80

Year	Number of hatcheries	Chicks hatched (000)	Poults hatched (000)	Value of chicks and poults hatched (000 dollars)
1973	25	6,827	947	2,947
1974	18	6,505	1,031	3,171
1975	15	5,830	712	2,932
1976	12	5,247	1,604	3,271
1977	13	5,415	1,756	3,437
1978	12	4,278	1,734	2,837
1979	11	4,283	2,041	3,135
1980	11	2,879	2,470	3,019

FARM PRODUCTS PRICES AND INCOME

PROFIT?
LOSS?
NET
GROSS

BY LARRY CANION

CASH RECEIPTS SET NEW RECORD

A third consecutive cash receipts record of $5.94 billion was established in 1980, 1 percent more than the $5.89 billion mark set in 1979 but 40 percent above the 1978 level of $4.23 billion. The impetus for the new record came from the largest wheat crop ever produced in Kansas that pushed cash receipts from crops to a record $2.59 billion, surpassing the 1979 mark by 10 percent. Cash receipts from farm marketings of livestock and livestock products dropped 5 percent to $3.36 billion but still goes in the books as the second largest behind the 1979 record of $3.53 billion. Livestock and livestock products accounted for 56 percent of total cash receipts, compared with 60 percent in 1979, while cash receipts for crops accounted for 44 percent of the total, compared with 40 percent in 1979.

Farm product prices showed a steady decline in the early stages of 1980 after reaching record highs in 1979. Only a temporary upturn in February broke the monotonous downward trend that lasted through May. An upturn was noted in June as the effects of a severe drought became evident and started driving prices upward. The All Farm Products Index reached its peak of 282 in October. The average for the year, at 267, was 2 points (1 percent) below the record 269 set in 1979.

The Livestock Price Index started the year at 279, moved up to 314 in February and then slowly fell to its lowest point of 257 in May. Hogs bottomed out at $26.70 per cwt. in April, then started a sharp climb that peaked at $46.30 per cwt. in October. All cattle peaked at $75.50 per cwt. in February and declined during the spring and early summer. A slight recovery was made in August and September, but prices slipped to their lowest point in November at $60.10 and finished the year at $61.10, down $4.60 per cwt. from January.

The Index of Prices Received for Crops, at 255 percent of the 1967 base, was up 23 points (10 percent) over 1979. Most crop prices fell during the first half of the year, pushing the Crops Index to its lowest point in April at 226. Moderate increases in corn, sorghum grain, and soybean prices in May and June started the index on an upswing that lasted through November and peaked at 295. Corn, sorghum grain, soybeans, and hay prices reached new highs during this period as the prospect of drought-shortened crops became increasingly evident. Most crops registered a moderate drop in price in December but hay, spurred by short supplies and winter feeding, continued to climb skyward.

NET INCOME UP

Kansas net income per farm in 1979, the latest year for which data are available, averaged $13,716, an increase of over 150 percent from the $5,466 posted in 1978. Cash receipts from the sale of farm products showed a 39 percent gain over 1978 while non-money income and other farm income showed lesser gains. Government payments declined by 58 percent. Gross income per farm rose to an all time high of $84,708, an increase of 34 percent over 1978.

Farm production expenses for 1979 rose 21 percent to reach a new high at $5.324 billion. All expense items increased in 1979 over 1978 with the greatest change occurring in rent to landlords which was up 36 percent. Most costs rose 20 to 30 percent but modest increases of 9 and 4 percent were noted for seed and taxes, respectively. Cost of livestock continues to be the largest expense component, accounting for 26 percent of all production expenditures.

FARM LABOR

The number of farm workers on Kansas farms averaged 104,000, up 9 percent over 1979. Hired workers accounted for about one-quarter of the total labor force, unchanged from a year earlier. Wage rates averaged $3.77 per hour in 1980, up 5 percent over 1979.

CASH RECEIPTS AND FARM INCOME, 1947-1980

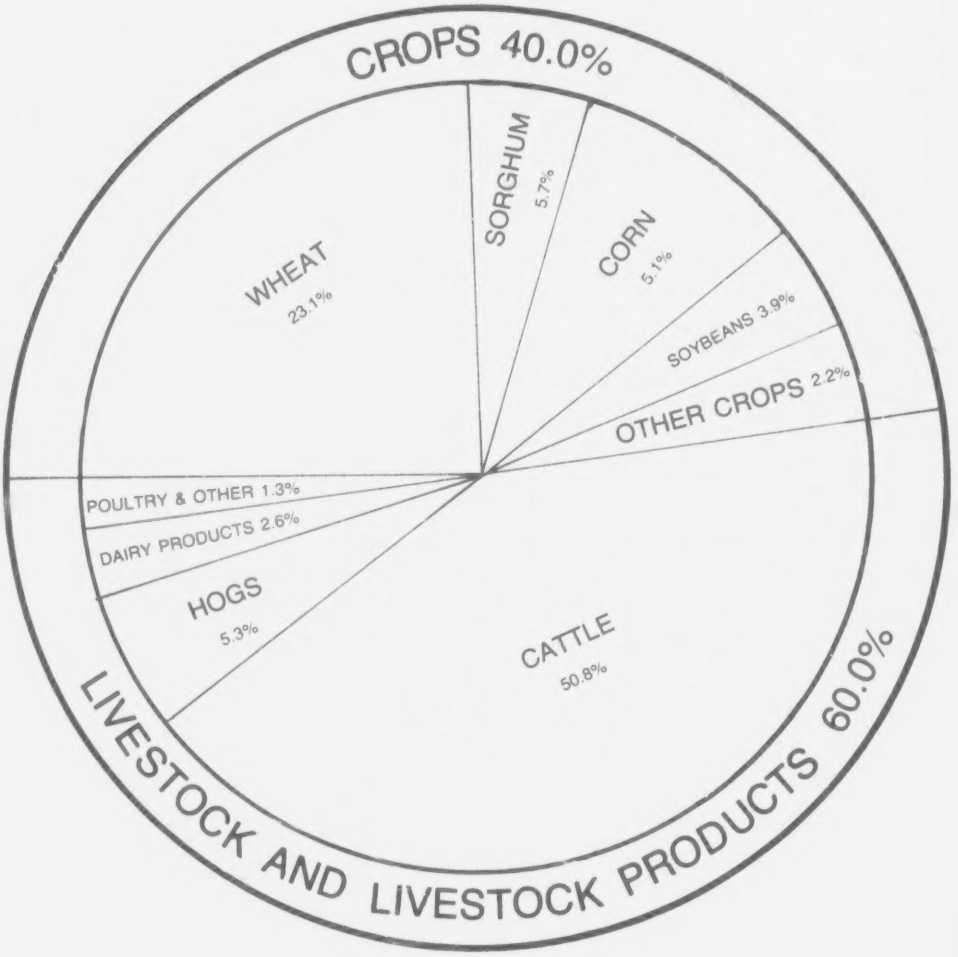
Year	Cash receipts					Realized income per farm	
	From farm marketings						
	Crops	Livestock & livestock products	Total	From government payments	Total receipts & payments	Gross	Net
	1,000 Dollars					Dollars	
1947	615,295	599,308	1,214,603	11,737	1,226,340	....	....
1948	584,354	549,024	1,133,378	7,365	1,140,743	....	....
1949	440,648	539,906	980,554	6,079	986,633	7,742	3,260
1950	461,455	571,820	1,033,275	9,117	1,042,392	8,254	3,048
1951	395,301	699,117	1,094,418	7,992	1,102,410	8,971	3,078
1952	546,567	634,323	1,180,890	11,352	1,192,242	9,849	3,737
1953	467,778	494,271	962,049	6,049	968,098	8,276	2,976
1954	477,128	483,827	960,955	8,638	969,593	8,404	2,677
1955	373,745	474,641	848,386	7,051	855,437	7,700	1,913
1956	381,398	495,266	876,664	16,869	893,533	8,088	2,495
1957	261,447	414,693	676,140	94,609	770,749	7,141	711
1958	609,263	557,695	1,166,958	34,965	1,201,923	11,217	3,195
1959	585,563	626,010	1,211,573	28,062	1,239,635	11,691	3,309
1960	611,877	605,311	1,217,188	28,455	1,245,643	12,075	2,896
1961	632,469	700,598	1,333,067	83.260	1,416,327	14,042	3,534
1962	641,187	762,881	1,404,068	105,362	1,509,430	15,220	3,981
1963	574,569	796,797	1,371,366	112,369	1,483,735	15,314	3,359
1964	442,895	742,029	1,184,924	188,763	1,373,687	14,678	3,390
1965	491,255	715,369	1,206,624	207,259	1,413,883	15,433	2,634
1966	537,574	975,860	1,513,434	225,641	1,739,075	19,413	4,703
1967	507,159	954,075	1,461,234	212,379	1,673,613	19,176	3,704
1968	480,114	976,484	1,456,598	228,176	1,684,774	19,788	3,033
1969	586,712	1,149,407	1,736,119	235,247	1,971,366	23,523	3,992
1970	719,493	1,265,277	1,984,770	227,639	2,212,409	26,696	5,384
1971	775,393	1,457,888	2,233,281	217,741	2,451,022	29,875	6,042
1972	1,016,119	1,962,729	2,978,848	246,409	3,225,257	39,455	10,488
1973	1,832,676	2,336,082	4,168,758	150,445	4,319,203	53,213	15,032
1974	2,115,658	1,850,619	3,966,277	22,457	3,988,734	50,325	14,833
1975	1,775,749	1,536,935	3,312,684	38,394	3,351,078	44,006	6,214
1976	1,698,916	1,907,908	3,606,824	50,824	3,657,648	49,228	5,611
1977	1,642,160	2,216,589	3,858,749	236,689	4,095,438	56,726	8,312
1978	1,299,361	2,931,051	4,230,412	300,926	4,531,338	63,420	5,466
1979	2,354,749	3,530,938	5,885,687	125,838	6,011,525	84,708	13,716
1980	2,585,954	3,355,098	5,941,052	N/A	N/A	N/A	N/A

GROSS AND NET FARM INCOME, 1968-80

Year	Realized gross farm income					Farm production expenses	Realized net farm income	Net change in farm inventories	Total net farm income
	Cash receipts from farm marketings	Government payments	Non-money income	Other farm income	Total[1]				
	Million Dollars								
1968	1,456.6	228.2	91.8	24.2	1,800.8	1,524.7	276.0	42.9	318.9
1969	1,736.1	235.2	95.8	26.4	2,093.6	1,738.3	355.3	43.1	398.4
1970	1,984.8	227.6	84.7	25.5	2,322.5	1,854.2	468.4	71.7	540.1
1971	2,233.3	217.7	88.0	30.3	2,569.3	2,049.7	519.6	99.4	619.0
1972	2,978.8	246.4	97.3	31.1	3,353.6	2,462.2	891.5	5.0	896.4
1973	4,168.8	150.4	112.3	38.4	4,469.9	3,207.3	1,262.6	162.2	1,424.8
1974	3,966.3	22.5	141.3	46.9	4,177.0	2,941.7	1,235.3	—326.0	909.3
1975	3,312.7	38.4	154.4	59.0	3,564.5	3,061.2	503.4	142.1	645.5
1976	3,606.8	50.8	166.4	64.9	3,889.0	3,445.8	443.2	—5.5	437.7
1977	3,858.7	236.7	190.6	81.8	4,367.9	3,727.8	640.0	—236.5	403.5
1978	4,230.4	300.9	199.5	89.1	4,819.9	4,404.5	415.4	419.1	834.6
1979	5,885.7	125.8	229.9	111.7	6,353.1	5,324.4	1,028.7	175.3	1,204.0
1980	5,941.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

[1] Total may not add due to rounding.

CASH RECEIPTS, 1979



PERCENT OF CASH RECEIPTS FROM MARKETINGS

Year	Crops			Livestock and their products						Total crops and live-stock
	Wheat	Other crops	Total crops	Cattle and calves	Hogs	Dairy prod-ucts	Poultry and eggs	Other live-stock	Total live-stock and products	
					Percent of total					
1930	24.3	10.2	34.5	29.1	15.0	9.0	10.5	1.9	65.5	100.0
1940	28.8	7.1	35.9	31.9	8.7	12.4	8.6	2.5	64.1	100.0
1950	33.7	11.0	44.7	34.0	6.6	6.1	5.5	3.1	55.3	100.0
1960	35.8	14.4	50.2	35.7	4.9	5.1	2.8	1.3	49.0	100.0
1970	22.4	13.9	36.3	49.9	7.4	4.8	1.1	.5	63.7	100.0
1972	20.2	13.9	34.1	54.8	6.9	3.2	.5	.5	65.9	100.0
1973	28.6	15.4	44.0	45.4	7.2	2.5	.6	.4	56.0	100.0
1974	30.9	22.4	53.3	35.8	6.9	2.8	.6	6	46.7	100.0
1975	32.6	21.0	53.6	33.8	7.6	3.8	.7	.7	46.4	100.0
1976	26.7	20.4	47.1	40.6	7.3	3.7	.6	.7	52.9	100.0
1977	23.1	19.5	42.6	45.2	7.4	3.5	.5	.8	57.4	100.0
1978	15.8	14.9	30.7	56.8	7.7	3.4	.5	.9	69.3	100.0
1979	23.1	16.9	40.0	50.8	5.3	2.6	.4	.9	60.0	100.0

FARM PRODUCTION EXPENSES, 1968-79

Year	Farm operating expenses						
	Feed	Livestock	Seed	Fertilizer and lime	Repairs and operations of capital items	Miscellaneous	Hired labor
	Million dollars						
1968	135.9	287.3	14.5	85.8	197.6	130.1	32.5
1969	178.0	381.4	16.3	80.8	194.2	148.6	37.9
1970	277.3	417.7	28.0	85.4	169.6	226.8	66.2
1971	298.5	498.2	31.6	84.5	174.6	249.4	71.4
1972	362.7	716.0	36.3	93.5	173.4	279.2	72.0
1973	534.0	813.3	62.4	127.9	199.4	322.7	88.2
1974	475.9	387.0	72.8	228.0	260.9	360.1	101.3
1975	385.2	425.9	77.0	270.1	302.3	406.2	113.7
1976	501.2	604.2	90.9	249.3	369.2	441.2	126.0
1977	500.0	736.6	70.0	233.4	415.4	535.6	136.3
1978	541.9	1,185.8	77.5	213.7	460.8	603.8	136.2
1979	635.8	1,402.0	84.3	240.9	569.3	748.6	175.1

Year	Total current farm operating expenses*	Depreciation and other consumption of farm capital	Taxes on farm property	Interest on farm mortgage debt	Net rent to non-farm landlords	Total production expenses*
	Million dollars					
1968	883.7	241.7	119.2	40.6	69.7	1,354.9
1969	1,037.1	259.0	125.3	45.6	81.9	1,548.9
1970	1,271.0	250.7	119.6	62.1	150.7	1,854.2
1971	1,408.2	276.7	122.9	66.5	175.3	2,049.7
1972	1,733.0	286.2	123.1	74.4	245.5	2,462.2
1973	2,148.0	350.2	119.2	87.6	502.3	3,207.3
1974	1,886.0	413.0	138.8	104.9	399.0	2,941.7
1975	1,980.4	483.4	144.7	115.9	336.8	3,061.2
1976	2,382.0	520.4	154.6	134.7	254.1	3,445.8
1977	2,627.3	510.4	179.5	155.4	255.2	3,727.8
1978	3,219.6	539.7	196.1	179.5	269.5	4,404.5
1979	3,856.1	680.8	203.6	218.0	366.0	5,324.4

* Items may not add because of rounding

AGRICULTURAL WORKERS, 1976-81

Year	January			April			July			October		
	Family	Hired	Total	Family	Hired	Total	Family	Hired	Total	Family	Hired	Total
	Thousand Workers											
1976	66	14	80	79	19	98	85	31	116	81	25	106
1977	69	15	84	70	15	85	87	27	114	76	31	107
1978	64	10	74	65	18	83	90	22	112	76	23	99
1979	50	13	63	59	19	78	92	32	124	89	24	113
1980	68	20	88	67	21	88	91	29	120	89	31	120
1981	73	23	96	85	31	116						

Farm Wage Rates, 1976-81

Year	January				April				July				October			
	All hired	Per hour cash	Field	Live-stock	All hired	Per hour cash	Field	Live-stock	All hired	Per hour cash	Field	Live-stock	All hired	Per hour cash	Field	Live-stock
	Dollars per hour															
1976[1]	2.89	2.72	2.77[1]		2.93	2.71	2.77[1]		2.86	2.52	2.76[1]		3.00	2.95	2.90[1]	
1977[1]	3.13	2.75	3.00[1]		3.08	3.12	2.98[1]		2.90	2.80	2.90	2.60	3.12	3.00	2.95	2.70
1978	3.47	3.10	3.10	3.00	3.47	3.16	3.15	2.82	3.30	3.24	3.00	2.91	3.39	3.40	2.90	2.86
1979	3.43	3.45	3.20	3.20	3.70	3.60	3.25	3.20	3.61	3.63	3.55	3.40	3.60	3.73	3.65	3.57
1980	3.93	4.00	3.68	3.51	3.72	3.75	3.60	3.45	3.70	3.76	3.48	3.70	3.73	3.90	3.62	3.51
1981	4.10	3.78	3.70	4.00	3.89	3.69	3.85	3.71								

1. Field and livestock rates combined.

FARM ASSETS AND DEBTS, 1977-1980

	1977	1978	1979	1980
	Number			
Farms	77,000	76,000	75,000	75,000
Assets	Million dollars			
Total farm assets	22,545.5	23,605.4	27,647.7	31,298.1
Real estate	17,235.5	17,355.9	19,928.8	22,723.0
Livestock and poultry	1,302.2	1,450.8	2,438.8	2,917.4
Machinery and motor vehicles	2,524.6	2,775.4	3,106.3	3,526.2
Crops	723.0	1,196.0	1,318.0	1,170.0
Financial assets	760.7	827.2	855.8	961.5
Claims				
Total farm debt	4,096.2	5,083.4	5,358.7	5,997.2
Real estate debt	1,858.3	2,202.7	2,309.4	2,710.4
Non-real estate debt	2,134.9	2,315.7	2,656.3	3,060.7
CCC loans	103.0	565.0	393.0	226.0
Equity	18,449.4	18,522.0	22,289.1	25,300.9
Ratios	Ratio			
Equity/assets	81.8	78.5	80.6	80.8
Debt/equity	22.2	27.4	24.0	23.7
Debt/assets, total	18.2	21.5	19.4	19.2

Index Numbers of Prices Received by Farmers
(1967 = 100)

	Crops					Livestock and Liveststock Products					All com-modities
	Food grains	Feed grains	Hay	Oil seeds	Total crops	Meat animals	Dairy products	Poultry and eggs	Misc. livestock	Total livestock and products	
1979											
January	205	185	240	254	202	288	252	241	223	285	249
February	206	184	254	273	204	309	247	231	251	304	261
March	207	184	247	277	204	323	247	266	245	317	268
April	211	192	242	276	209	327	241	252	251	320	272
May	224	198	228	274	218	323	235	211	258	316	273
June	259	232	222	283	250	296	235	222	242	291	273
July	268	234	224	286	257	292	235	206	226	287	274
August	255	220	210	276	244	288	239	193	220	283	266
September	267	214	212	261	248	303	252	202	226	298	276
October	272	210	212	234	249	282	264	192	226	280	266
November	274	210	226	230	250	291	266	220	254	288	271
December	264	208	235	233	244	306	266	260	232	303	277
Annual average	243	206	229	263	232	302	248	225	238	298	269

Index Numbers of Prices Received by Farmers

(1967 = 100)

	Crops					Livestock and Livestock Products					
	Food Grains	Feed Grains	Hay	Oil Seeds	Total Crops	Meat Animals	Dairy Products	Poultry and Eggs	Misc Livestock	Total Livestock and Products	All Commodities
1980											
January	258	210	235	232	241	281	264	203	258	279	262
February	260	209	224	232	241	319	266	175	276	314	282
March	242	208	215	218	229	292	264	198	283	289	263
April	238	208	201	210	226	262	266	190	264	261	246
May	239	212	199	213	228	258	260	165	261	257	244
June	242	218	196	224	232	263	256	166	245	261	249
July	252	257	219	262	253	281	256	175	261	278	267
August	263	269	256	284	266	289	256	203	251	285	277
September	274	276	288	308	276	285	272	230	251	284	280
October	288	282	322	313	288	278	282	213	236	278	282
November	291	294	327	323	295	266	293	248	223	267	279
December	279	288	329	299	285	269	293	293	229	270	276
Annual Average	261	244	251	260	255	279	269	205	253	277	267

PRICES RECEIVED BY FARMERS

Monthly Averages, 1980

Month	Wheat per bushel	Corn per bushel	Sorghum grain per cwt.	Soybeans per bushel	Alfalfa[1] hay (baled) per ton	Other hay[1] (baled) per ton	All Hay[1] (baled) per ton
	Dollars						
January	3.71	2.50	3.85	5.92	54.00	42.50	50.00
February	3.73	2.45	3.89	5.92	52.00	41.50	48.00
March	3.48	2.47	3.83	5.56	51.00	38.00	46.00
April	3.42	2.44	3.86	5.36	48.00	38.50	44.00
May	3.44	2.49	3.92	5.45	42.00	41.50	42.00
June	3.48	2.59	4.00	5.73	43.00	41.00	42.00
July	3.62	2.92	4.86	6.69	50.00	46.00	48.50
August	3.78	3.10	5.06	7.24	56.50	54.00	55.50
September	3.93	3.22	5.14	7.86	63.00	57.00	60.50
October	4.14	3.27	5.27	8.00	68.00	63.00	66.00
November	4.18	3.45	5.46	8.24	73.50	69.00	71.50
December	4.01	3.37	5.36	7.64	72.50	71.00	72.00

Month	Hogs per cwt.	Calves per cwt.	Lambs per cwt.	Milk cows[1] each	Milk per cwt.	Eggs[1] per dozen
	Dollars					Cents
January	34.90	83.90	67.80	1,120.00	12.80	44.5
February	35.60	85.00	63.00	1,160.00	12.90	38.4
March	32.10	80.50	67.80	1,160.00	12.80	43.4
April	26.70	75.20	57.70	1,240.00	12.90	41.5
May	27.60	71.30	62.60	1,230.00	12.60	36.2
June	32.60	75.00	65.60	1,220.00	12.40	36.4
July	40.40	70.10	67.20	1,210.00	12.40	38.3
August	45.60	75.20	66.00	1,150.00	12.40	44.5
September	45.60	73.90	65.40	1,150.00	13.20	50.3
October	46.30	75.80	66.10	1,170.00	13.70	46.7
November	44.90	75.30	55.90	1,210.00	14.20	54.2
December	42.80	71.20	53.70	1,210.00	14.20	64.2

[1] Mid-Month

PRICES RECEIVED FOR BEEF CATTLE, 1979-1980

Month	1979			1980		
	Steers heifers	Cows	All cattle	Steers heifers	Cows	All cattle
	Dollars Per Cwt.					
January	65.10	49.40	64.60	69.00	49.10	65.70
February	70.10	51.60	69.60	77.20	53.50	75.50
March	74.80	54.90	74.00	71.00	51.80	69.20
April	76.60	57.50	75.70	64.40	44.70	62.30
May	76.00	56.60	75.00	63.50	43.30	61.20
June	69.40	52.00	68.70	64.30	43.00	61.60
July	68.50	50.10	67.80	68.30	42.90	64.70
August	68.10	47.10	67.10	69.00	43.80	65.80
September	72.80	49.40	70.90	68.90	45.70	64.90
October	69.60	48.40	66.20	68.10	44.90	63.00
November	71.40	47.20	68.30	65.70	44.40	60.10
December	74.10	46.90	71.70	66.10	42.40	61.10

U. S. PARITY PRICE FOR FARM PRODUCTS, 1980

Month	Wheat		Corn		Sorghum		Beef Cattle		Hogs	
	Parity price per bu.	Kansas Avg. price as % of parity	Parity price per bu.	Kansas Avg. price as % of parity	Parity price per Cwt.	Kansas Avg. price as % of parity	Parity price per Cwt.	Kansas Avg. price as % of parity	Parity price per Cwt.	Kansas Avg. price as % of parity
January	$6.27	59	$4.35	57	$7.31	53	$79.30	83	$74.40	47
February	6.36	59	4.41	56	7.41	52	80.40	94	75.40	47
March	6.43	54	4.45	56	7.49	51	81.30	85	76.20	42
April	6.43	53	4.45	55	7.49	52	81.30	77	76.20	35
May	6.46	53	4.47	56	7.53	52	81.60	75	76.60	36
June	6.51	53	4.51	57	7.58	53	82.20	75	77.10	42
July	6.57	55	4.55	64	7.65	64	83.30	78	77.90	52
August	6.65	57	4.61	67	7.75	65	84.40	78	78.90	58
September	6.71	59	4.65	69	7.81	66	85.10	76	79.50	57
October	6.76	61	4.68	70	7.87	67	85.70	74	80.10	58
November	6.81	61	4.72	73	7.94	69	86.40	70	80.70	56
December	6.84	59	4.74	71	7.97	67	86.70	70	81.10	53

U. S. PARITY PRICE FOR FARM PRODUCTS, 1980

Month	Soybeans		Eggs		Calves		Lambs		Milk	
	Parity price per bu.	Kansas Avg. price as % of parity	Parity price per doz.	Kansas Avg. price as % of parity	Parity price per Cwt.	Kansas Avg. price as % of parity	Parity price per Cwt.	Kansas Avg. price as % of parity	Parity price per Cwt.	Kansas Avg. price as % of parity
January	$10.90	54	$1.000	45	$94.50	89	$88.00	77	$17.40	74
February	11.10	53	1.010	38	95.90	89	89.20	71	17.60	73
March	11.20	50	1.030	42	96.90	83	90.20	75	17.80	72
April	11.20	48	1.030	40	96.90	78	90.20	64	17.80	72
May	11.20	49	1.030	35	97.30	73	90.60	69	17.90	70
June	11.30	51	1.040	35	98.10	76	91.30	72	18.00	69
July	11.40	59	1.050	36	99.00	71	93.70	72	18.20	68
August	11.60	62	1.060	42	100.00	75	94.90	70	18.40	67
September	11.70	67	1.070	47	101.00	73	95.60	68	18.60	71
October	11.70	68	1.080	43	102.00	74	96.30	69	18.70	73
November	11.80	70	1.090	50	103.00	73	97.10	58	18.90	75
December	11.90	64	1.090	59	103.00	69	97.50	55	18.90	75

PRICES PAID FOR PRODUCTION ITEMS

Item	1976	1977	1978	1979	1980
	Dollars				
Electricity, per K.W.H.	.034	.040	.045	.048	.050
Gasoline, Tank Truck, per gallon	.528	.571	.598	.813	1.140
Diesel Fuel, per gallon	.387	.435	.456	.692	.976

Item	1977	1978	1979	1980	1981
Seeds					
Alfalfa, Certified, per cwt	167.00	195.00	200.00	200.00	190.00
Alfalfa, Uncertified, per cwt	124.00	135.00	131.00	130.00	125.00
Wheat, per bu.[1]	5.60	5.60	5.60	7.10	7.30
Corn, per bu.	42.00	43.00	50.00	56.00	66.00
Grain Sorghum, per cwt	38.00	47.00	42.00	50.50	57.00
Forage Sorghum, per cwt	27.50	21.00	22.00	22.50	33.50
Soybeans, per bu.	13.00	10.50	11.50	11.00	13.50

1 September previous year.

PRICES PAID FOR FEEDS, 1980

Month	Beef cattle Concentrate 32-36%	Cotton-seed Meal 41%	Soybean Meal 44%	Corn Meal	Hog Feed		Bran	Middlings
					14-18%	38-42%		
	Dollars Per Cwt.							
January	10.00	13.00	12.00	6.30	9.40	13.50	7.90	7.80
February	9.80	13.50	12.00	6.50	10.00	14.00	8.10	7.80
March	10.00	13.00	12.00	6.30	9.90	14.50	8.20	7.60
April	9.90	12.00	10.50	5.80	9.20	13.50	8.30	7.10
May	9.70	11.50	10.50	5.40	10.00	13.00	8.30	7.10
June	9.70	12.50	10.50	5.80	9.40	13.00	8.10	7.30
July	9.80	12.00	11.50	5.80	9.40	14.00	8.00	7.40
August	10.50	12.50	13.00	6.50	10.50	14.50	8.10	7.20
September	11.00	12.50	13.50	6.80	11.00	15.60	8.30	7.80
October	11.00	12.50	14.50	7.40	11.00	16.20	8.30	8.20
November	11.50	14.00	15.50	7.80	11.50	17.00	8.60	8.20
December	12.00	14.50	15.50	7.40	11.50	17.00	9.40	9.30

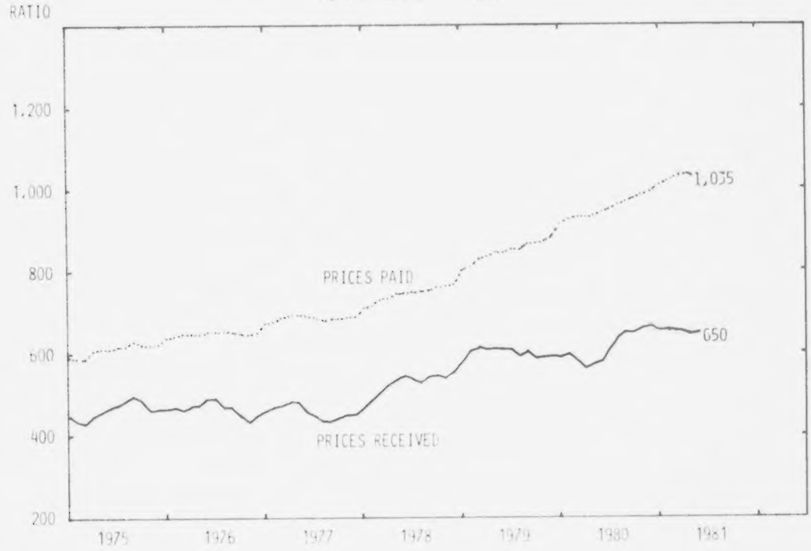
Month	Mixed Dairy Feed			Laying Feed	Stock Salt
	14%	16%	32%		
	Dollars per Ton				Dollars per Cwt.
January	150.00	160.00	240.00	187.00	2.50
February	154.00	161.00	182.00	190.00	2.65
March	155.00	161.00	235.00	189.00	2.55
April	153.00	163.00	210.00	176.00	2.55
May	150.00	162.00	230.00	184.00	2.65
June	150.00	168.00	235.00	184.00	2.60
July	150.00	167.00	235.00	184.00	2.65
August	160.00	175.00	245.00	200.00	2.65
September	175.00	193.00	245.00	220.00	2.60
October	175.00	191.00	250.00	225.00	2.60
November	178.00	194.00	260.00	235.00	2.80
December	183.00	200.00	270.00	235.00	2.75

PRICES PAID FOR FEEDER PIGS, 1974-80

Month	1974	1975	1976	1977	1978	1979	1980
	Dollars per Cwt.						
February	67.70	50.90	95.00	54.00	79.50	97.00	60.00
May	63.50	83.00	102.00	81.50	105.00	93.00	47.00
August	40.50	91.50	78.00	77.00	96.50	51.00	58.50
November	42.70	108.00	57.00	79.50	107.00	51.00	79.00

PRICES PAID AND PRICES RECEIVED INDEXES, U.S.

1910-1914 = 100



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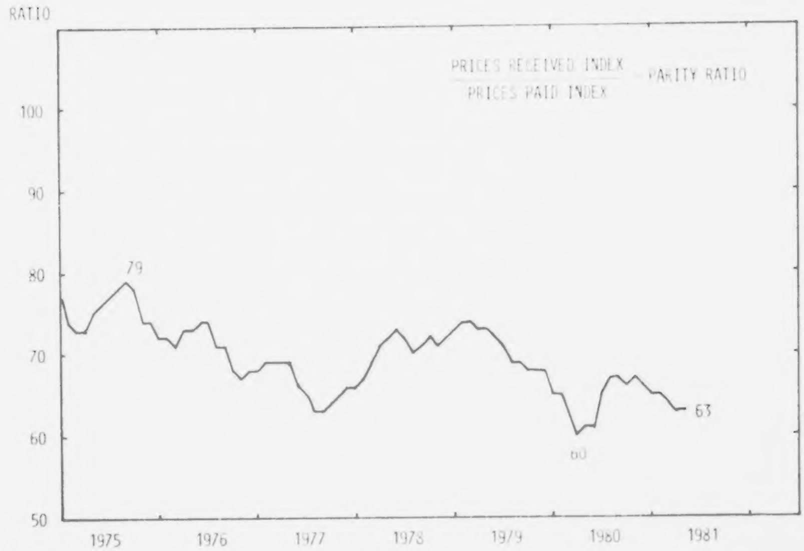
PARITY RATIO, U.S.

1910-1914 = 100



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Historic

FARM FACTS

LIVESTOCK, 1867-1981

Livestock on Kansas farms January 1, and aggregate value

Year	Horses (thousands)	Mules (thousands)	Hogs * (thousands)	All cattle and calves (thousands)	Milk cows** (thousands)	Stock sheep (thousands)	Value of all livestock (thousands)
1867	60	6	330	377	82	147	$12,710
1868	80	9	350	402	89	147	12,935
1869	100	11	375	473	109	162	17,921
1870	119	15	410	571	141	178	24,956
1871	150	20	455	696	162	178	34,964
1872	175	22	610	787	191	187	31,271
1873	200	23	750	859	214	196	32,019
1874	230	30	950	972	231	216	35,746
1875	240	33	750	892	236	216	28,451
1876	252	36	800	870	260	259	35,575
1877	300	45	1,100	949	273	300	42,128
1878	350	52	1,550	1,036	295	400	51,286
1879	420	62	1,675	1,132	322	500	52,254
1880	456	70	1,700	1,247	351	800	64,072
1881	485	70	1,600	1,408	400	1,040	72,227
1882	500	68	1,650	1,601	448	1,150	80,539
1883	550	70	1,800	1,835	488	1,245	106,059
1884	620	80	2,500	2,141	527	1,270	134,487
1885	675	89	3,000	2,282	555	1,220	140,879
1886	740	98	2,550	2,434	575	1,100	133,707
1887	800	102	2,400	2,644	610	850	142,069
1888	865	105	2,000	2,765	640	662	136,914
1889	900	104	2,150	2,892	653	563	133,738
1890	910	97	2,600	2,880	648	394	129,442
1891	995	92	2,500	2,800	638	384	123,287
1892	1,015	95	2,100	2,752	630	360	124,788
1893	1,050	102	2,010	2,600	625	343	125,928
1894	1,045	106	2,200	2,350	620	292	102,776
1895	1,040	109	2,250	2,200	600	240	83,328
1896	1,025	106	2,410	2,389	575	290	88,390
1897	1,000	100	3,000	2,800	600	320	103,916
1898	960	100	3,400	3,100	620	300	130,116
1899	975	104	2,900	3,224	625	320	138,526
1900	970	106	2,800	3,520	638	300	161,536
1901	990	106	2,750	3,864	642	260	174,217
1902	970	111	1,985	3,870	645	225	164,999
1903	1,010	118	2,095	4,039	655	240	178,628
1904	1,005	120	2,550	4,014	663	250	168,991
1905	1,010	129	2,600	3,830	660	260	163,556
1906	1,060	135	2,695	3,540	670	255	180,690
1907	1,100	155	3,140	3,272	675	225	211,398
1908	1,125	180	3,600	3,010	685	200	204,130
1909	1,138	195	2,825	3,205	690	220	217,841
1910	1,150	216	2,220	3,000	700	250	251,821
1911	1,190	236	2,775	2,945	675	275	267,750
1912	1,180	245	2,220	2,700	670	280	239,404
1913	1,135	252	2,063	2,730	675	255	270,108
1914	1,148	270	1,870	2,475	675	215	260,014
1915	1,137	297	2,340	3,085	700	210	306,510
1916	1,126	305	2,225	3,300	725	230	314,096
1917	1,120	300	1,890	3,400	750	240	330,941
1918	1,142	280	2,041	3,450	775	275	388,282
1919	1,153	260	2,075	3,500	750	280	391,893
1920	1,083	243	1,733	2,975	695	285	296,683
1921	1,040	279	1,947	3,012	769	274	227,784
1922	1,019	284	2,392	2,991	723	244	173,475
1923	978	305	2,990	3,058	730	176	188,366
1924	958	282	2,747	3,200	737	189	178,466
1925	931	260	2,467	3,068	760	220	183,061
1926	894	242	2,220	2,896	775	246	194,785
1927	840	229	2,109	2,638	775	269	179,393
1928	798	203	2,531	2,731	760	306	204,911
1929	758	185	3,006	2,945	760	352	245,396
1930	728	160	2,826	3,090	780	359	239,871
1931	684	154	2,487	3,250	811	359	171,172
1932	648	144	3,073	3,410	857	370	124,185
1933	628	134	3,165	3,580	890	381	107,305
1934	604	120	2,430	3,860	967	389	108,915
1935	589	104	1,200	3,386	921	385	108,643
1936	548	91	1,248	3,080	828	370	162,689
1937	506	79	874	2,741	755	344	140,869
1938	450	70	804	2,505	709	354	125,801
1939	407	66	1,085	2,600	709	462	144,454
1940	383	63	1,519	2,770	727	527	145,597

LIVESTOCK, 1867-1981—*Concluded*

Year	Horses (thousands)	Mules (thousands)	Hogs * (thousands)	All cattle and calves (thousands)	Milk cows** (thousands)	Stock ‡‡ sheep (thousands)	Value of all livestock (thousands)
1941	375	63	1,276	3,186	749	606	168,911
1942	371	60	1,672	3,568	786	667	233,965
1943	378	54	2,291	4,032	833	687	349,995
1944	367	47	2,474	4,274	841	604	330,139
1945	352	44	1,336	4,231	807	495	304,709
1946	317	35	1,470	3,723	726	406	301,451
1947	279	24	1,176	3,537	697	349	370,673
1948	246	19	1,094	3,325	648	342	438,009
1949	219	16	1,182	3,624	623	311	515,537
1950	195	13	1,253	3,588	604	342	463,662
1951	170	11	1,504	3,911	604	393	691,150
1952	141	10	1,489	4,341	574	440	794,078
1953	113	7	893	4,341	574	387	501,129
1954	99	5	697	4,298	557	387	406,346
1955	87	4	905	4,341	535	395	410,860
1956	80	‡	1,041	4,167	508	423	360,800
1957	70	‡	916	3,459	483	444	315,838
1958	68	‡	953	3,874	447	475	499,779
1959	68	‡	1,229	4,300	411	484	697,044
1960	72	‡	1,315	4,429	390	494	585,046
1961	‡	‡	1,249	4,562	374	534	605,095
1962	‡	‡	1,411	4,973	355	534	695,323
1963	‡	‡	1,482	5,222	327	502	756,804
1964	‡	‡	1,452	5,431	301	442	669,625
1965	‡	‡	1,307	5,214	280	393	578,987
1966	‡	‡	1,242	5,735	263	401	772,961
1967	‡	‡	1,503	5,620	250	385	809,727
1968	‡	‡	1,578	5,564	240	333	810,204
1969	‡	‡	1,767	5,675	225	286	894,847
1970	‡	‡	1,643	6,016	204	272	1,089,053
1971	‡	‡	2,202	6,497	183	253	1,156,544
1972	‡	‡	2,100	6,757	172	240	1,412,770
1973	‡	‡	2,100	6,800	162	221	1,756,612
1974	‡	‡	2,000	6,990	150	290	2,328,550
1975	‡	‡	1,750	6,400	147	220	969,425
1976	‡	‡	1,650	6,450	137	165	1,325,333
1977	‡	‡	1,850	6,400	135	173	1,302,790
1978	‡	‡	2,000	6,000	132	205	1,450,968
1979	‡	‡	2,000	6,200	125	220	2,437,630
1980	‡	‡	2,090	6,200	120	235	2,944,040
1981	‡	‡	1,900	6,450	123	200	2,748,250

* Hogs January 1, 1867-1954, Preceding December 1, 1955 to date.
‡ Horses and mules combined 1956, and discontinued in 1961.
** Milk cows that have calved beginning 1970.
‡‡ All sheep beginning 1974.

WHEAT, 1866-1980

Year	Acres sown (thousands)	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1866		68	19.0	1,292	$1.33	$1,718,360
1867		89	12.5	1,112	1.32	1,467,840
1868		99	14.5	1,436	1.00	1,436,000
1869		151	16.0	2,416	.63	1,522,080
1870		156	15.5	2,418	.77	1,861,860
1871		169	16.0	2,704	1.02	2,758,080
1872		186	11.5	2,139	1.26	2,695,140
1873		310	14.0	4,340	.92	3,992,800
1874		705	13.7	9,658	.76	7,340,080
1875		735	17.0	12,495	.76	9,496,200
1876		1,000	14.5	14,500	.79	11,455,000
1877		1,021	13.5	13,784	.80	11,027,200
1878		1,705	16.0	27,280	.59	16,095,200
1879		1,861	9.3	17,307	.89	15,403,230
1880		2,340	10.0	23,400	.70	16,380,000
1881		2,180	9.5	20,710	1.05	21,745,500
1882		1,600	20.0	32,000	.67	21,440,000
1883		1,220	17.5	21,350	.78	16,653,000
1884		2,190	18.0	39,420	.45	17,739,000
1885		1,370	10.5	14,385	.65	9,350,250
1886		1,320	11.5	15,180	.58	8,804,400
1887		1,240	9.5	11,780	.61	7,185,800
1888		1,090	15.0	16,350	.88	14,388,000
1889		1,583	19.2	30,394	.55	16,716,700
1890		2,160	15.0	32,400	.77	24,948,000
1891		3,660	16.0	58,560	.73	42,748,800
1892		3,540	18.0	63,720	.52	33,134,400

WHEAT, 1866-1980—*Concluded*

Year	Acres sown (thousands)	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1893		3,490	9.0	31,410	.42	13,192,200
1894		3,860	10.5	40,530	.44	17,833,200
1895		2,390	8.0	19,120	.45	8,604,000
1896		3,130	14.5	45,385	.63	28,592,550
1897		3,050	17.0	51,850	.74	38,369,000
1898		4,580	15.0	68,700	.50	34,350,000
1899		3,804	10.2	38,801	.52	20,176,520
1900		4,290	18.2	78,078	.55	42,942,900
1901		5,260	17.0	89,420	.59	52,757,800
1902		4,300	11.0	47,300	.55	26,015,000
1903		5,850	15.8	92,430	.59	54,533,700
1904		5,100	12.5	63,750	.89	56,737,500
1905		5,580	14.0	78,120	.71	55,465,200
1906		5,810	14.5	84,245	.58	48,862,100
1907		6,880	11.0	75,680	.82	62,057,600
1908		6,770	12.5	84,625	.88	74,470,000
1909	6,488	5,974	13.0	77,451	.98	75,902,000
1910	6,983	4,870	12.4	60,475	.87	52,613,000
1911	7,373	5,300	10.7	56,799	.86	48,847,000
1912	7,867	6,460	14.5	93,695	.80	74,956,000
1913	7,791	7,250	12.0	86,790	.78	67,696,000
1914	9,112	8,650	20.0	172,750	.93	160,658,000
1915	9,493	8,520	12.5	106,478	.97	103,284,000
1916	8,683	8,170	12.0	97,980	1.44	141,091,000
1917	9,608	3,730	11.5	42,785	2.12	90,704,000
1918	10,199	7,250	13.5	97,710	2.00	195,420,000
1919	11,671	11,624	13.2	153,311	2.14	328,086,000
1920	10,559	9,294	15.6	144,933	1.76	255,082,000
1921	11,470	10,554	12.7	133,964	1.03	137,983,000
1922	12,299	9,756	12.8	124,809	.94	117,320,000
1923	11,601	8,299	10.1	83,804	.90	75,424,000
1924	10,226	9,817	16.0	157,022	1.15	180,575,000
1925	10,941	8,755	9.2	80,539	1.48	119,198,000
1926	11,695	10,409	14.8	153,991	1.20	184,789,000
1927	12,750	10,202	11.2	114,216	1.24	141,628,000
1928	12,761	10,639	16.3	173,185	.99	171,453,000
1929	13,142	12,550	12.4	155,563	.99	154,007,000
1930	13,687	13,132	14.2	186,277	.63	117,355,000
1931	13,898	13,623	18.5	251,885	.33	83,122,000
1932	12,963	10,365	11.6	120,178	.33	39,659,000
1933	13,231	7,361	9.1	66,931	.71	47,521,000
1934	12,699	8,610	9.8	84,323	.84	70,831,000
1935	13,456	6,888	9.3	64,055	.89	57,009,000
1936	14,254	10,458	11.5	120.234	1.00	120,234,000
1937	17,110	13,172	12.0	158,052	1.01	159,633,000
1938	16,942	14,494	10.5	152,163	.57	86,733,000
1939	13,703	9,574	12.0	114,858	.66	75,806,000
1940	12,360	8,739	14.5	126,553	.64	80,994,000
1941	13,091	11,799	14.7	173,332	.94	162,932,000
1942	10,861	10,374	19.3	200,101	1.09	218,110,000
1943	10,741	10,159	14.2	144,241	1.37	197,610,000
1944	13,210	11,377	16.5	187,700	1.42	266,534,000
1945	14,148	13,416	15.5	207,939	1.49	309,829,000
1946	14,006	13,147	16.2	212,977	1.91	406,786,000
1947	15,404	14,855	19.3	286,702	2.25	645,080,000
1948	14,634	13,221	17.5	231,368	1.97	455,795,000
1949	16,244	14,279	11.0	157,069	1.89	296,860,000
1950	13,807	12,280	14.5	178,060	2.02	359,681,000
1951	14,773	9,701	13.0	126,113	2.13	268,621,000
1952	15,068	14,649	21.0	307,629	2.14	658,326,000
1953	14,315	11,573	12.5	144,662	2.11	305,237,000
1954	11,738	10,069	17.5	176,208	2.18	384,133,000
1955	10,799	8,559	15.0	128,385	2.06	264,473,000
1956	10,907	9,244	15.5	143,282	2.00	286,564,000
1957	7,199	5,269	19.0	100,111	1.96	196,218,000
1958	10,727	10,433	28.5	297,340	1.78	529,265,000
1959	10,727	10,329	20.5	211,744	1.78	376,904,000
1960	10,727	10,329	28.5	294,376	1.74	512,214,000
1961	10,727	10,329	26.5	273,718	1.79	489,955,000
1962	9,762	8,986	23.5	211,171	2.06	435,012,000
1963	10,641	8,627	21.5	185,480	1.86	344,993,000
1964	10,535	9,490	22.0	208,780	1.37	286,029,000
1965	11,272	10,059	23.5	236,386	1.35	319,121,000
1966	11,047	10,260	19.5	200,070	1.64	328,115,000
1967	13,146	11,081	20.0	221,620	1.35	299,187,000
1968	11,963	9,751	26.0	253,526	1.22	309,302,000
1969	10,767	9,849	31.0	305,319	1.19	363,330,000
1970	9,690	9,061	33.0	299,013	1.25	373,766,000
1971	9,593	9,061	34.5	312,605	1.32	412,639,000
1972	10,300	9,400	33.5	314,900	1.68	529,032,000
1973	10,800	10,400	37.0	384,800	3.75	1,443,000,000
1974	12,000	11,600	27.5	319,000	3.86	1,231,340,000
1975	12,800	12,100	29.0	350,900	3.42	1,200,078,000
1976	12,900	11,300	30.0	339,000	2.59	878,010,000
1977	13,200	12,100	28.5	344,850	2.24	772,464,000
1978	11,300	10,000	30.0	300,000	2.89	867,000,000
1979	12,100	10,800	38.0	410,400	3.72	1,526,688,000
1980	13,000	12,000	35.0	420,000	3.85	1,617,000,000

SORGHUMS FOR ALL PURPOSES AND PRODUCTION OF GRAIN, 1929-1980

Year	All purposes		Grain				
	Acres planted (thousands)	Acres harvested (thousands)	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1929	1,701	1,606	728	15.4	11,203	$0.63	$7,058,000
1930	1,683	1,570	729	10.9	7,982	.42	3,352,000
1931	1,794	1,710	925	15.6	14,672	.27	3,961,000
1932	2,334	2,100	1,008	13.4	13,490	.26	3,507,000
1933	2,755	2,624	1,180	10.5	12,334	.43	5,304,000
1934	3,028	2,065	112	5.0	557	1.08	602,000
1935	3,704	2,830	739	5.9	4,380	.68	2,978,000
1936	2,960	2,070	185	5.0	925	1.04	962,000
1937	2,697	2,230	1,120	9.9	11,033	.46	5,075,000
1938	2,849	2,530	1,103	11.8	13,060	.35	4,571,000
1939	3,157	2,598	853	9.5	8,122	.55	4,467,000
1940	4,607	4,109	1,885	12.8	24,128	.40	9,651,000
1941	3,549	3,313	1,275	17.2	21,885	.53	11,599,000
1942	3,156	2,859	1,173	16.7	19,589	.85	16,651,000
1943	3,488	3,160	1,161	14.5	16,834	1.17	19,696,000
1944	3,846	3,768	2,229	22.1	49,261	.91	44,828,000
1945	3,054	2,879	1,149	15.4	17,695	1.17	20,703,000
1946	2,718	2,505	851	13.5	11,488	1.30	14,934,000
1947	2,256	2,154	754	14.5	10,933	1.96	21,429,000
1948	2,459	2,391	1,339	21.5	28,788	1.30	37,424,000
1949	2,361	2,319	1,392	21.5	29,928	1.18	35,315,000
1950	3,187	3,084	1,943	23.0	44,689	1.07	47,817,000
1951	4,143	3,948	2,605	22.0	57,310	1.32	75,649,000
1952	2,610	2,408	1,324	14.0	18,536	1.45	26,877,000
1953	3,863	3,588	2,009	16.0	32,144	1.27	40,823,000
1954	5,910	5,454	3,567	14.5	51,722	1.25	64,652,000
1955	6,501	5,454	2,891	11.5	33,246	1.01	33,578,000
1956	5,201	3,872	1,626	15.0	24,390	1.22	29,756,000
1957	8,166	7,783	6,071	21.0	127,491	.97	123,666,000
1958	4,981	4,825	3,860	34.0	131,240	.98	128,615,000
1959	5,180	5,066	4,053	34.0	137,802	.77	106,108,000
1960	5,491	5,370	4,296	39.0	167,544	.78	130,684,000
1961	3,734	3,652	2,792	40.0	111,680	.96	107,213,000
1962	3,958	3,908	2,960	43.5	128,760	.96	123,610,000
1963	5,066	4,924	3,789	39.0	147,771	.92	135,949,000
1964	4,306	4,136	3,031	32.5	98,508	1.04	102,448,000
1965	4,048	3,971	3,031	46.0	139,426	.97	135,243,000
1966	3,805	3,733	2,849	49.0	139,601	1.03	143,789,000
1967	4,338	4,218	3,248	46.0	149,408	.94	140,444,000
1968	4,468	4,345	3,475	47.0	163,325	.91	148,626,000
1969	4,066	3,997	3,266	56.0	182,896	.99	181,067,000
1970	4,391	4,277	3,560	41.0	145,960	1.12	163,475,000
1971	5,180	5,102	4,325	54.0	233,550	.95	221,873,000
1972	4,400	4,270	3,500	62.0	217,000	1.39	301,630,000
1973	4,650	4,550	3,900	56.0	218,400	2.13	465,192,000
1974	4,100	3,975	3,320	40.0	132,800	2.69	357,232,000
1975	4,100	3,951	3,500	42.0	147,000	2.27	333,690,000
1976	4,500	4,321	3,750	44.0	165,000	1.86	306,900,000
1977	4,550	4,450	3,800	62.0	235,600	1.74	409,944,000
1978	4,450	4,340	3,860	51.0	196,860	1.99	391,751,000
1979	4,350	4,290	3,570	69.0	246,330	2.20	541,926,000
1980	4,700	4,400	3,640	43.0	156,520	2.94	460,169,000

SORGHUM FOR SILAGE AND FORAGE, 1929-1980

Year	Silage			Forage		
	Acres harvested (thousands)	Yield per acre, tons	Production, tons (thousands)	Acres harvested (thousands)	Yield per acre, tons	Production, tons (thousands)
1929	55	5.9	326	823	2.20	1,811
1930	54	4.9	267	787	1.80	1,416
1931	62	5.4	335	723	1.94	1,404
1932	106	5.8	614	986	1.78	1,753
1933	175	4.2	743	1,269	1.72	2,182
1934	277	2.3	638	1,676	1.35	2,263
1935	283	4.0	1,143	1,808	1.50	2,712
1936	265	3.0	806	1,620	1.10	1,790
1937	217	4.8	1,036	893	1.50	1,338
1938	248	6.4	1,582	1,179	1.83	2,153
1939	278	4.7	1,314	1,466	1.44	2,107
1940	286	6.2	1,773	1,937	1.79	3,467
1941	452	6.9	3,119	1,585	2.14	3,392
1942	325	7.0	2,275	1,359	2.26	3,071
1943	458	5.6	2,565	1,539	1.61	2,478
1944	412	7.0	2,884	1,125	2.13	2,396
1945	342	5.5	1,881	1,386	1.64	2,273
1946	350	6.0	2,100	1,302	1.60	2,083
1947	409	5.3	2,168	989	1.40	1,385
1948	359	7.6	2,728	692	1.90	1,315
1949	278	7.3	2,029	649	1.85	1,201
1950	370	8.5	3,145	771	2.00	1,542

SORGHUM FOR SILAGE AND FORAGE, 1929-1980—*Concluded*

Year	Silage			Forage		
	Acres harvested (thousands)	Yield per acre, tons	Production, tons (thousands)	Acres harvested (thousands)	Yield per acre, tons	Production, tons (thousands)
1951	553	7.5	4,148	790	2.10	1,659
1952	409	5.3	2,168	675	1.50	1,012
1953	610	6.0	3,660	969	1.50	1,454
1954	633	5.0	3,165	1,254	1.30	1,630
1955	818	4.2	3,436	1,745	.90	1,570
1956	658	4.5	2,961	1,588	.70	1,112
1957	856	8.1	6,934	856	2.20	1,883
1958	507	9.5	4,816	458	3.00	1,374
1959	532	8.5	4,522	481	2.20	1,058
1960	590	8.9	5,251	484	2.30	1,113
1961	496	10.4	5,158	364	2.60	946
1962	506	11.3	5,718	442	2.90	1,282
1963	582	10.0	5,820	553	2.80	1,548
1964	477	8.7	4,150	628	1.80	1,130
1965	501	10.5	5,260	439	2.80	1,229
1966	441	11.0	4,851	443	2.70	1,196
1967	432	10.0	4,320	538	2.30	1,237
1968	354	10.5	3,717	516	2.30	1,187
1969	269	12.5	3,363	462	3.50	1,617
1970	264	8.0	2,112	453	2.20	997
1971	337	11.0	3,707	440	2.50	1,100
1972	320	13.0	4,160	450	3.20	1,440
1973	300	12.0	3,600	350	3.00	1,050
1974	265	9.6	2,544	390	2.30	897
1975	271	9.0	2,439	180	2.10	378
1976	311	8.5	2,674	260	1.90	494
1977	300	12.5	3,750	350	3.00	1,050
1978	220	10.0	2,200	260	2.80	728
1979	320	12.0	3,840	400	3.40	1,360
1980	305	9.0	2,745	455	2.60	1,183

CORN FOR ALL PURPOSES, 1866-1919

Year	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1866	217	28.0	6,076	$0.44	$2,673,440
1867	260	38.5	10,010	.39	3,903,900
1868	340	20.0	6,800	.74	5,032,000
1869	445	38.5	17,132	.35	5,996,200
1870	570	28.0	15,960	.52	8,299,200
1871	860	36.5	31,390	.26	8,161,400
1872	1,160	36.0	41,760	.19	7,934,400
1873	1,371	23.5	32,218	.29	9,343,220
1874	1,740	10.5	18,270	.82	14,981,400
1875	2,206	34.5	76,107	.20	15,221,400
1876	2,105	35.0	73,675	.22	16,208,500
1877	2,926	34.0	99,484	.20	19,896,800
1878	2,745	28.5	78,232	.19	14,864,080
1879	3,418	30.9	105,616	.27	28,516,320
1880	3,726	29.5	109,917	.29	31,875,930
1881	4,200	18.0	75,600	.58	43,848,000
1882	4,662	33.5	156,177	.37	57,785,490
1883	5,129	36.5	187,208	.26	48,674,080
1884	4,960	37.0	183,520	.22	40,374,400
1885	5,456	32.5	177,320	.24	42,556,800
1886	6,301	22.0	138,622	.27	37,427,940
1887	5,666	14.5	82,157	.37	30,398,090
1888	7,566	26.5	200,499	.26	52,129,740
1889	7,319	35.5	259,824	.18	46,768,320
1890	3,807	10.5	39,974	.51	20,386,740
1891	5,386	26.5	142,729	.34	48,527,860
1892	5,791	24.5	141,880	.31	43,982,800
1893	6,391	21.5	137,406	.31	42,595,860
1894	3,576	11.0	39,336	.43	16,914,480
1895	8,400	24.5	205,800	.19	39,102,000
1896	8,008	28.0	224,224	.18	40,360,320
1897	8,408	19.0	159,752	.22	35,145,440
1898	7,315	19.0	138,985	.26	36,136,100
1899	8,266	27.8	229,795	.25	57,448,750
1900	7,472	19.0	141,968	.32	45,429,760
1901	6,836	8.0	54,688	.63	34,453,440
1902	7,140	30.0	214,200	.34	72,828,000
1903	6,707	26.0	174,382	.36	62,777,520
1904	6,707	21.0	140,847	.41	57,747,270

CORN ALL PURPOSES, 1866-1919—*Concluded*

Year	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1905	7,042	28.0	197,176	.33	65,068,080
1906	6,819	29.0	197,751	.32	63,280,320
1907	7,087	22.0	155,914	.44	68,602,160
1908	7,386	22.0	162,492	.55	89,370,600
1909	8,109	19.1	154,882	.59	91,380,000
1910	8,950	19.0	170,050	.48	81,624,000
1911	8,157	14.5	118,276	.67	79,245,000
1912	7,575	23.0	174,225	.53	92,339,000
1913	7,320	3.0	21,960	.76	16,690,000
1914	5,850	18.5	108,225	.69	74,675,000
1915	5,550	31.0	172,050	.63	108,392,000
1916	6,950	10.0	69,500	1.09	75,755,000
1917	9,156	13.0	119,028	1.51	179,732,000
1918	6,130	7.0	42,910	1.59	68,227,000
1919	4,370	15.5	67,735	1.49	100,925,000

CORN FOR ALL PURPOSES AND PRODUCTION OF GRAIN,1919-1980

Year	All purposes		Grain				
	Acres planted (thousands)	Acres harvested (thousands)	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1919	....	4,370	3,676	15.5	56,978	$1.49	$84,897,000
1920	....	5,331	4,607	26.2	120,703	.47	56,730,000
1921	....	4,638	3,988	22.8	90,926	.43	39,098,000
1922	....	5,195	4,461	19.0	84,759	.68	57,636,000
1923	....	5,713	5,022	23.0	115,506	.72	83,164,000
1924	....	6,056	5,494	21.7	119,220	.96	114,451,000
1925	....	6,722	5,894	17.6	103,734	.67	69,502,000
1926	5,781	5,781	4,561	12.0	54,732	.75	41,049,000
1927	6,241	6,241	5,736	27.0	154,872	.72	111,508,000
1928	6,988	6,988	6,303	25.0	157,575	.74	116,606,000
1929	6,875	6,643	5,649	18.0	101,682	.72	74,228,000
1930	7,150	6,776	5,399	12.5	67,488	.52	35,094,000
1931	6,863	6,573	5,515	18.0	99,270	.28	27,796,000
1932	7,687	7,362	6,317	19.0	120,023	.27	32,406,000
1933	7,764	6,994	5,548	12.0	66,576	.44	29,293,000
1934	5,174	3,777	172	5.2	894	.97	867,000
1935	5,600	4,380	2,409	9.5	22,886	.73	16,707,000
1936	5,109	2,759	497	6.0	2,982	1.19	3,549,000
1937	2,995	2,456	1,719	13.0	22,347	.56	12,514,000
1938	2,456	2,260	1,944	21.0	40,824	.50	20,412,000
1939	3,316	2,757	2,095	15.2	31,844	.58	18,470,000
1940	3,051	2,647	1,959	17.5	34,282	.58	19,884,000
1941	2,624	2,488	2,314	23.0	53,222	.73	38,852,000
1942	3,201	3,110	2,939	27.0	79,353	.91	72,211,000
1943	3,713	3,514	2,987	23.0	68,701	1.10	75,571,000
1944	3,602	3,549	3,372	27.6	93,067	1.02	94,928,000
1945	3,062	2,981	2,757	23.5	64,790	1.23	79,692,000
1946	3,154	3,011	2,469	22.0	54,318	1.54	83,650,000
1947	2,460	2,318	1,986	18.0	35,748	2.21	79,003,000
1948	2,435	2,364	2,281	32.5	74,132	1.29	95,630,000
1949	2,532	2,459	2,316	27.7	64,153	1.19	76,342,000
1950	2,608	2,557	2,442	35.0	85,470	1.43	122,222,000
1951	2,791	2,429	2,187	24.0	52,488	1.73	90,804,000
1952	2,819	2,720	1,986	22.5	44,685	1.53	68,368,000
1953	2,453	2,366	1,774	22.0	39,028	1.48	57,761,000
1954	2,281	2,082	1,349	24.0	32,376	1.48	47,916,000
1955	1,802	1,624	1,039	24.0	24,936	1.39	34,661,000
1956	1,694	1,527	901	25.0	22,525	1.35	30,409,000
1957	1,575	1,527	1,206	30.0	36,180	1.13	40,883,000
1958	1,780	1,726	1,571	42.0	65,982	1.05	69,281,000
1959	1,976	1,933	1,730	42.0	72,660	1.02	74,113,000
1960	2,016	1,972	1,725	45.5	78,488	.98	76,918,000
1961	1,431	1,400	1,225	48.0	58,800	1.08	63,504,000
1962	1,545	1,512	1,298	51.0	66,198	1.10	72,818,000
1963	1,730	1,693	1,350	46.0	62,100	1.12	69,552,000
1964	1,401	1,371	1,040	45.0	46,800	1.19	55,692,000
1965	1,289	1,261	1,050	59.0	61,950	1.17	72,482,000
1966	1,366	1,324	1,029	58.0	59,682	1.28	76,393,000
1967	1,366	1,324	1,060	68.0	72,080	1.06	76,405,000
1968	1,448	1,417	1,134	78.0	88,452	1.06	93,759,000
1969	1,515	1,470	1,208	79.0	95,432	1.13	107,838,000
1970	1,689	1,637	1,285	64.0	82,240	1.31	107,734,000
1971	1,660	1,627	1,311	95.0	124,545	1.12	139,490,000
1972	1,570	1,540	1,250	104.0	130,000	1.52	197,600,000
1973	1,900	1,860	1,540	100.0	154,000	2.46	378,840,000
1974	2,160	2,100	1,670	79.0	131,930	3.01	397,109,000
1975	1,950	1,910	1,640	86.0	141,040	2.50	352,600,000
1976	2,150	2,105	1,790	96.0	171,840	2.12	364,301,000
1977	2,030	1,985	1,680	96.0	161,280	1.99	320,947,000
1978	1,820	1,783	1,500	102.0	153,000	2.35	359,550,000
1979	1,750	1,720	1,470	117.0	171,990	2.51	431,695,000
1980	1,790	1,713	1,240	94.0	116,560	3.40	396,304,000

CORN FOR SILAGE AND FORAGE, 1925-1980

Year	Silage			Forage
	Acres harvested (thousands)	Yield per acre, tons	Production, tons (thousands)	Acres harvested (thousands)
1925	128			700
1926	220			1,000
1927	106			399
1928	139			552
1929	184	5.0	920	810
1930	414	3.8	1,573	963
1931	348	4.5	1,566	710
1932	250	5.0	1,250	795
1933	454	3.5	1,589	992
1934	945	2.0	1,890	2,660
1935	657	3.0	1,971	1,314
1936	773	1.7	1,314	1,489
1937	246	3.1	763	491
1938	147	3.8	559	169
1939	221	2.9	641	441
1940	265	3.0	795	423
1941	50	4.5	225	124
1942	47	5.5	258	124
1943	105	4.2	441	422
1944	35	5.5	192	142
1945	60	4.5	270	164
1946	211	3.8	802	331
1947	155	3.7	574	177
1948	49	6.0	294	34
1949	86	5.7	490	57
1950	66	6.5	429	49
1951	121	5.1	617	121
1952	490	3.8	1,862	244
1953	379	4.4	1,668	213
1954	481	3.2	1,539	252
1955	390	3.4	1,326	195
1956	458	3.9	1,786	168
1957	283	6.0	1,698	38
1958	129	9.0	1,161	26
1959	180	8.0	1,440	23
1960	227	8.5	1,930	20
1961	157	10.0	1,570	18
1962	201	11.0	2,211	13
1963	312	9.5	2,964	31
1964	309	8.5	2,626	22
1965	198	11.0	2,178	13
1966	273	10.5	2,866	22
1967	240	12.5	3,000	24
1968	271	12.5	3,388	12
1969	252	13.5	3,402	10
1970	343	10.5	3,602	9
1971	313	14.0	4,382	3
1972	280	15.5	4,340	10
1973	305	15.0	4,575	15
1974	410	9.5	3,895	20
1975	260	12.0	3,120	10
1976	300	13.0	3,900	15
1977	290	14.5	4,205	15
1978	273	13.0	3,549	10
1979	245	16.0	3,920	5
1980	426	9.0	3,834	47

SOYBEANS, 1924-1980

Year	Acres planted for all purposes	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1924	11	2	11.0	22	$2.32	$51,000
1925	12	4	10.0	40	2.52	101,000
1926	12	4	10.0	40	2.19	88,000
1927	9	3	12.0	36	1.98	71,000
1928	13	4	11.0	44	1.94	85,000
1929	15	4	9.0	36	2.12	76,000
1930	27	7	7.5	52	1.66	86,000
1931	44	12	9.0	108	.67	72,000
1932	44	11	7.3	80	.77	62,000
1933	55	11	8.5	94	1.14	107,000
1934	48	7	5.0	35	1.39	49,000
1935	38	7	6.5	46	1.10	51,000
1936	39	6	4.0	24	1.57	38,000
1937	28	4	8.0	32	.96	31,000
1938	38	6	10.5	63	.99	62,000
1939	45	11	8.0	88	1.05	92,000
1940	78	26	12.0	312	.96	300,000
1941	83	47	11.5	540	1.58	853,000
1942	290	212	11.5	2,438	1.59	3,876,000
1943	313	244	9.5	2,318	1.80	4,172,000

SOYBEANS FOR BEANS, 1924-1980—*Concluded*

Year	Acres planted for all purposes	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1944	203	185	13.7	2,534	$2.03	$5,144,000
1945	258	235	10.0	2,350	2.06	4,841,000
1946	225	198	11.0	2,178	2.53	5,510,000
1947	250	230	8.5	1,955	3.18	6,217,000
1948	198	176	15.0	2,640	2.26	5,966,000
1949	271	257	14.5	3,726	2.07	7,713,000
1950	409	397	18.0	7,146	2.33	16,650,000
1951	495	401	14.5	5,814	2.66	15,465,000
1952	703	640	11.5	7,360	2.65	19,504,000
1953	598	484	7.0	3,388	2.45	8,301,000
1954	425	291	7.0	2,037	2.44	4,970,000
1955	374	335	10.0	3,350	2.11	7,069,000
1956	408	355	8.5	3,018	2.06	6,217,000
1957	241	214	11.5	2,461	1.97	4,848,000
1958	434	421	22.0	9,262	1.86	17,227,000
1959	443	434	21.0	9,114	1.83	16,679,000
1960	594	586	21.5	12,599	1.98	24,946,000
1961	731	703	21.5	15,114	2.17	32,797,000
1962	936	914	17.5	15,995	2.17	34,709,000
1963	852	823	14.5	11,934	2.45	29,238,000
1964	656	642	18.0	11,556	2.51	29,006,000
1965	886	873	21.0	18,333	2.39	43,816,000
1966	930	917	22.5	20,632	2.70	55,706,000
1967	846	825	22.5	18,562	2.42	44,920,000
1968	973	957	25.0	23,925	2.30	55,028,000
1969	866	852	23.0	19,596	2.22	43,503,000
1970	990	930	15.0	13,950	2.74	38,223,000
1971	880	871	20.5	17,856	2.99	53,389,000
1972	900	875	28.0	24,500	4.10	100,450,000
1973	1,240	1,200	22.0	26,400	5.67	149,688,000
1974	1,030	990	20.0	19,800	6.34	125,532,000
1975	1,100	1,080	21.0	22,680	4.77	108,184,000
1976	900	865	15.0	12,975	6.52	84,597,000
1977	1,020	990	28.5	28,215	5.50	155,183,000
1978	1,520	1,490	18.0	26,820	6.64	178,085,000
1979	1,580	1,560	26.5	41,340	5.97	246,800,000
1980	1,550	1,450	16.5	23,925	7.60	181,830,000

OATS, 1866-1980

Year	Acres sown (thousands)	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1866		55	36.0	1,980	$0.33	$653,400
1867		60	33.0	1,980	.35	693,000
1868		80	30.0	2,400	.42	1,008,000
1869		110	37.5	4,125	.29	1,196,250
1870		145	29.5	4,278	.36	1,540,080
1871		175	31.5	5,512	.27	1,488,240
1872		235	32.5	7,638	.19	1,451,220
1873		285	30.0	8,550	.21	1,795,500
1874		315	20.0	6,300	.48	3,024,000
1875		290	28.5	8,265	.21	1,735,650
1876		390	27.0	10,530	.20	2,106,000
1877		310	33.5	10,385	.18	1,869,300
1878		405	32.0	12,960	.17	2,203,200
1879		436	23.5	10,246	.26	2,663,960
1880		390	22.0	8,580	.32	2,745,600
1881		440	29.0	12,760	.40	5,104,000
1882		475	35.0	16,625	.30	4,987,500
1883		700	39.0	27,300	.21	5,733,000
1884		780	35.0	27,300	.22	6,006,000
1885		875	31.5	27,562	.23	6,339,260
1886		990	30.0	29,700	.25	7,425,000
1887		1,290	31.5	40,635	.29	11,784,150
1888		1,440	33.5	48,240	.22	10,612,800
1889		1,490	30.5	45,445	.15	6,816,750
1890		1,230	24.0	29,520	.38	11,217,600
1891		1,300	32.5	42,250	.27	11,407,500
1892		1,560	28.5	44,460	.26	11,559,600
1893		1,590	18.5	29,415	.27	7,942,050
1894		1,440	18.0	25,920	.31	8,035,200
1895		1,610	20.0	32,200	.17	5,474,000
1896		1,480	13.0	19,240	.16	3,078,400
1897		980	24.0	23,520	.18	4,233,600
1898		1,060	20.5	21,730	.22	4,780,600
1899		940	27.2	25,568	.22	5,624,960
1900		1,060	31.5	33,390	.23	7,679,700

OATS, 1866-1980—*Concluded*

Year	Acres sown (thousands)	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1901		1,170	17.5	20,475	$0.43	$8,804,250
1902		1,020	32.5	33,150	30	9,945,000
1903		1,230	25.0	30,750	30	9,225,000
1904		1,260	18.0	22,680	33	7,484,400
1905		1,130	27.0	30,510	28	8,542,800
1906		1,190	23.5	27,965	31	8,669,150
1907		1,110	15.0	16,650	42	6,993,000
1908		830	20.0	16,600	45	7,470,000
1909		933	24.6	22,952	46	10,558,000
1910		1,650	33.0	54,450	36	19,602,000
1911		2,060	15.0	30,900	43	13,287,000
1912		1,510	31.0	46,810	39	18,256,000
1913		1,600	19.5	31,200	44	13,728,000
1914		1,460	31.0	45,260	42	19,009,000
1915		1,400	26.0	36,400	43	15,652,000
1916		1,460	23.0	33,580	52	17,462,000
1917		2,150	31.0	66,650	73	48,654,000
1918		2,175	22.0	47,850	73	34,930,000
1919		1,420	25.6	36,352	79	28,718,000
1920		1,846	28.0	51,688	58	29,979,000
1921		1,698	19.1	32,432	32	10,378,000
1922		1,358	16.5	22,407	41	9,187,000
1923		1,222	22.3	27,251	47	12,808,000
1924		1,415	23.0	32,545	53	17,249,000
1925		1,627	20.5	33,354	45	15,009,000
1926	1,546	1,546	18.5	28,601	43	12,298,000
1927	1,267	1,267	20.5	25,974	47	12,208,000
1928	1,292	1,292	25.4	32,817	43	14,111,000
1929	1,170	1,150	21.0	24,150	45	10,868,000
1930	1,404	1,357	28.0	37,996	35	12,919,000
1931	1,607	1,561	29.0	45,269	19	8,601,000
1932	1,703	1,577	24.0	37,848	16	6,056,000
1933	1,737	1,528	19.0	29,032	33	9,581,000
1934	1,495	1,272	16.0	20,352	49	9,972,000
1935	1,694	1,540	29.0	44,660	32	14,291,000
1936	2,016	1,679	21.0	35,259	47	16,572,000
1937	1,568	1,414	26.0	36,764	37	13,603,000
1938	1,615	1,471	26.0	38,246	23	8,797,000
1939	1,663	1,267	18.6	23,566	35	8,248,000
1940	1,630	1,495	31.0	46,345	30	13,904,000
1941	1,728	1,619	24.0	38,856	36	13,988,000
1942	1,970	1,813	25.5	46,232	48	22,191,000
1943	2,147	1,976	24.0	47,424	71	33,671,000
1944	1,825	1,561	16.2	25,288	73	18,460,000
1945	1,278	968	17.5	16,940	71	12,027,000
1946	1,495	1,423	28.5	40,556	82	33,256,000
1947	1,510	1,395	29.0	40,455	1.04	42,073,000
1948	1,616	1,144	22.0	25,168	80	20,134,000
1949	1,034	858	19.4	16,645	71	11,818,000
1950	1,520	901	21.0	18,921	86	16,272,000
1951	1,186	748	18.0	13,464	93	12,522,000
1952	996	838	20.5	17,179	89	15,289,000
1953	1,235	989	21.5	21,264	78	16,586,000
1954	1,235	1,080	33.0	35,640	74	26,374,000
1955	1,383	1,123	27.5	30,882	64	19,764,000
1956	1,383	1,078	21.5	23,177	[illegible]	[illegible]
1957	1,397	1,121	30.5	34,190	60	20,514,000
1958	685	516	26.0	13,416	[illegible]	[illegible]
1959	843	681	24.0	16,344	67	10,950,000
1960	514	422	34.0	14,348	64	9,183,000
1961	658	549	31.0	17,019	67	11,403,000
1962	520	351	22.5	7,898	71	5,608,000
1963	426	344	30.0	10,320	[illegible]	[illegible]
1964	405	316	29.0	9,164	71	6,506,000
1965	259	205	32.0	6,560	72	4,723,000
1966	280	215	28.0	6,020	76	4,575,000
1967	218	161	36.0	5,796	76	4,405,000
1968	222	180	38.0	6,840	72	4,925,000
1969	159	126	39.0	4,914	71	3,489,000
1970	215	183	42.0	7,686	72	5,534,000
1971	220	165	45.0	7,425	72	5,346,000
1972	195	145	44.0	6,380	82	5,232,000
1973	120	86	40.0	3,440	1.21	4,172,000
1974	210	168	33.0	5,544	1.74	9,647,000
1975	140	109	40.0	4,360	1.62	7,063,000
1976	250	200	42.0	8,400	1.55	13,020,000
1977	285	210	45.0	9,450	1.10	10,395,000
1978	150	105	39.0	4,095	1.40	5,733,000
1979	135	85	44.0	3,740	1.65	6,171,000
1980	175	120	38.0	4,560	1.90	8,664,000

BEST AVAILABLE COPY

BARLEY, 1866-1980

Year	Acres sown (thousands)	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1866		2	23.0	46	$0.91	$42,000
1867		2	21.0	42	1.08	45,000
1868		4	22.0	88	.99	87,000
1869		4	23.5	94	.82	77,000
1870		4	17.5	70	.74	52,000
1871		5	20.5	102	.69	70,000
1872		8	21.5	172	.59	101,000
1873		12	19.5	234	.70	164,000
1874		14	17.0	238	.79	188,000
1875		19	12.0	228	.57	130,000
1876		27	18.0	486	.44	214,000
1877		26	21.5	559	.33	184,000
1878		27	20.5	554	.31	172,000
1879		24	12.6	302	.43	130,000
1880		17	7.0	119	.54	64,000
1881		6	14.0	84	.75	63,000
1882		9	24.5	220	.53	117,000
1883		16	21.5	344	.40	138,000
1884		21	26.5	556	.33	183,000
1885		22	18.0	396	.34	135,000
1886		24	18.0	432	.36	156,000
1887		21	11.0	231	.43	99,000
1888		6	26.5	159	.53	84,000
1889		7	23.0	161	.32	52,000
1890		18	22.0	396	.57	226,000
1891		26	27.0	702	.40	281,000
1892		44	23.5	1,034	.35	362,000
1893		67	7.0	469	.47	220,000
1894		37	6.0	222	.49	109,000
1895		49	11.5	564	.23	130,000
1896		62	6.5	403	.22	89,000
1897		75	16.0	1,200	.25	300,000
1898		90	22.5	2,025	.27	547,000
1899		119	12.4	1,476	.27	399,000
1900		127	18.0	2,286	.33	754,000
1901		138	8.5	1,173	.45	528,000
1902		139	14.5	2,016	.38	766,000
1903		138	24.0	3,312	.34	1,126,000
1904		150	14.0	2,100	.37	777,000
1905		225	18.0	4,050	.32	1,296,000
1906		218	13.5	2,943	.33	971,000
1907		190	5.0	950	.54	513,000
1908		170	10.0	1,700	.58	986,000
1909		166	13.4	2,224	.54	1,201,000
1910		230	13.0	2,990	.47	1,405,000
1911		220	7.0	1,540	.58	893,000
1912		146	20.0	2,920	.42	1,226,000
1913		232	7.0	1,624	.54	877,000
1914		221	20.0	4,420	.51	2,254,000
1915		240	24.5	5,880	.45	2,646,000
1916		250	12.0	3,000	.69	2,070,000
1917		500	7.0	3,500	1.22	4,270,000
1918		385	9.0	3,465	.99	3,430,000
1919		425	21.0	8,925	1.03	9,193,000
1920		599	20.5	12,280	.60	7,368,000
1921		570	15.5	8,835	.36	3,181,000
1922		627	14.4	9,029	.42	3,792,000
1923		614	18.0	11,052	.49	5,415,000
1924		583	13.0	7,579	.64	4,851,000
1925		496	10.5	5,208	.62	3,229,000
1926	347	347	9.8	3,401	.63	2,143,000
1927	452	452	12.0	5,424	.61	3,309,000
1928	633	633	21.0	13,293	.50	6,646,000
1929	612	582	16.5	9,603	.48	4,609,000
1930	502	466	20.5	9,553	.42	4,012,000
1931	562	513	16.0	8,208	.22	1,806,000
1932	731	586	14.0	8,204	.15	1,231,000
1933	936	282	8.5	2,397	.39	935,000
1934	537	145	8.2	1,189	.64	761,000
1935	433	260	14.0	3,640	.51	1,856,000
1936	528	364	11.0	4,904	.67	2,683,000

BARLEY, 1866-1980—*Concluded*

Year	Acres sown (thousands)	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1937	514	298	11.5	3,427	$0.56	$1,919,000
1938	452	393	17.0	6,681	.31	2,071,000
1939	1,160	647	11.0	7,117	.41	2,918,000
1940	1,308	1,136	17.0	19,312	.35	6,759,000
1941	1,478	1,326	21.0	27,846	.44	12,252,000
1942	1,788	1,233	13.5	16,646	.58	9,655,000
1943	1,538	1,110	14.0	15,540	.95	14,763,000
1944	1,031	722	17.8	12,852	.98	12,595,000
1945	480	383	18.5	7,086	.97	6,873,000
1946	360	287	17.5	5,022	1.25	6,278,000
1947	328	290	22.0	6,380	1.51	9,634,000
1948	459	362	19.0	6,878	1.15	7,910,000
1949	266	221	17.5	3,868	.94	3,636,000
1950	636	254	14.5	3,683	1.14	4,199,000
1951	343	119	13.0	1,547	1.25	1,934,000
1952	120	86	15.5	1,333	1.29	1,720,000
1953	167	112	14.0	1,568	1.15	1,803,000
1954	551	459	22.5	10,328	1.03	10,638,000
1955	937	688	18.5	12,728	.89	11,328,000
1956	806	578	18.0	10,404	.93	9,676,000
1957	846	688	22.0	15,136	.84	12,714,000
1958	812	674	27.5	18,535	.81	15,013,000
1959	999	890	26.0	23,140	.70	16,198,000
1960	1,077	730	26.0	18,980	.71	13,476,000
1961	991	840	31.0	26,040	.86	22,394,000
1962	1.041	689	19.0	13,091	.86	11,258,000
1963	708	276	18.0	4,968	.87	4,322,000
1964	581	406	25.0	10,150	.85	8,628,000
1965	232	138	26.5	3,657	.91	3,328,000
1966	220	182	25.0	4,550	.97	4,414,000
1967	119	80	27.0	2,160	.98	2,117,000
1968	125	100	37.0	3,700	.91	3,367,000
1969	200	170	37.0	6,290	.82	5,158,000
1970	215	187	37.0	6,919	.85	5,881,000
1971	205	175	42.0	7,350	.97	7,130,000
1972	110	94	46.0	4,324	1.01	4,367,000
1973	80	70	43.0	3,010	1.64	4,936,000
1974	55	45	34.0	1,530	2.06	3,152,000
1975	55	50	37.0	1,850	2.02	3,737,000
1976	75	62	35.0	2,170	2.00	4,340,000
1977	85	73	36.0	2,628	1.51	3,968,000
1978	66	55	42.0	2,310	1.70	3,927,000
1979	66	52	44.0	2,288	2.13	4,873,000
1980	69	59	41.0	2,419	2.35	5,685,000

RYE, 1869-1980

Year	Acres sown (thousands)	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1869		1	14.5	14	$0.68	$10,000
1870		4	15.0	60	.69	41,000
1871		5	15.0	75	.66	50,000
1872		5	15.0	75	.71	53,000
1873		21	15.0	315	.57	180,000
1874		24	13.0	312	65	203,000
1875		64	13.0	832	.50	416,000
1876		125	13.5	1,688	.42	709,000
1877		90	14.0	1,260	.36	454,000
1878		96	13.5	1,296	.31	401,760
1879		35	11.9	416	.51	212,160
1880		37	10.0	370	.49	181,300
1881		38	11.5	437	.74	323,380
1882		125	16.0	2,000	.40	800,000
1883		180	15.0	2,700	.37	999,000
1884		180	15.0	2,700	.35	945,000
1885		115	12.0	1,380	.40	552,000
1886		100	13.0	1,300	.41	533,000
1887		90	8.0	720	.44	316,800
1888		115	13.0	1,495	.46	687,700
1889		199	14.6	2,905	26	755,300
1890		120	13.0	1,560	.55	858,000
1891		135	14.5	1,958	.64	1,253,120
1892		135	14.0	1,890	.40	756,000
1893		120	6.5	780	.38	296,400
1894		80	8.0	640	.46	294,400
1895		108	8.5	918	.38	348,840
1896		65	10.0	650	.35	227,500
1897		70	12.5	875	.40	350,000

RYE, 1869-1980—*Concluded*

Year	Acres sown (thousands)	Acres harvested (thousands)	Yield, bushels	Production, bushels (thousands)	Price per bushel	Farm value
1898		83	13.0	1,079	$0.37	$399,230
1899		81	10.0	810	.42	340,200
1900		71	14.0	994	.43	427,420
1901		75	13.0	975	.55	536,250
1902		75	11.0	825	.45	371,250
1903		70	13.0	910	.44	400,400
1904		57	10.0	570	.65	370,500
1905		43	12.0	516	.54	278,640
1906		26	12.0	312	.50	156,000
1907		20	8.0	160	.66	105,600
1908		20	9.0	180	.73	131,000
1909		17	9.3	158	.74	117,000
1910		20	8.5	170	.72	122,000
1911		18	5.5	99	.80	79,000
1912		30	12.0	360	.73	263,000
1913		45	9.5	428	.70	300,000
1914		50	14.5	725	.79	573,000
1915		50	12.0	600	.80	480,000
1916		60	10.0	600	1.00	600,000
1917		110	11.0	1,210	1.79	2,166,000
1918		175	12.0	2,100	1.62	3,402,000
1919		190	10.5	1,995	1.50	2,992,000
1920		95	12.5	1,188	1.39	1,651,000
1921		78	9.5	741	.79	585,000
1922		54	11.0	594	.69	410,000
1923		34	8.5	289	.70	202,000
1924		33	11.1	366	.93	340,000
1925		35	9.5	332	.94	312,000
1926		33	10.7	353	.89	314,000
1927		39	10.7	417	.93	388,000
1928		20	12.0	240	.80	192,000
1929		14	10.5	147	.84	123,000
1930	50	18	10.5	189	.56	106,000
1931	67	25	12.0	300	.32	96,000
1932	53	19	11.0	209	.25	52,000
1933	48	16	9.0	144	.59	85,000
1934	61	20	9.8	196	.76	149,000
1935	167	60	10.5	630	.53	334,000
1936	143	58	10.5	609	.85	518,000
1937	187	84	11.5	966	.70	676,000
1938	145	65	11.0	715	.37	265,000
1939	152	65	10.5	682	.45	307,000
1940	147	64	10.5	672	.40	269,000
1941	198	89	11.0	979	.55	538,000
1942	230	117	11.0	1,287	.59	759,000
1943	239	129	10.5	1,354	.97	1,313,000
1944	225	101	10.5	1,060	1.00	1,060,000
1945	207	81	10.5	850	1.19	1,012,000
1946	120	53	10.5	556	1.80	1,001,000
1947	136	57	11.0	627	2.20	1,379,000
1948	90	34	11.5	391	1.51	590,000
1949	65	28	9.7	272	1.12	305,000
1950	102	42	10.0	420	1.26	529,000
1951	87	30	9.5	285	1.55	442,000
1952	92	42	11.0	462	1.71	790,000
1953	100	38	9.5	361	1.32	477,000
1954	200	85	11.5	978	1.08	1,056,000
1955	264	69	10.0	690	.98	676,000
1956	280	66	11.5	759	1.04	789,000
1957	361	160	16.0	2,560	1.01	2,586,000
1958	365	168	17.5	2,940	.93	2,734,000
1959	321	143	15.0	2,145	.85	1,823,000
1960	321	140	18.0	2,520	.80	2,016,000
1961	279	108	17.0	1,836	.89	1,634,000
1962	399	179	15.5	2,774	.90	2,497,000
1963	335	124	12.5	1,550	.94	1,457,000
1964	362	130	15.5	2,015	.93	1,874,000
1965	221	60	16.5	990	.90	891,000
1966	203	57	15.0	855	.96	821,000
1967	126	30	13.5	405	.95	385,000
1968	94	33	15.5	512	.93	476,000
1969	169	59	19.0	1,121	.88	986,000
1970	210	86	22.0	1,892	.89	1,684,000
1971	270	120	22.0	2,640	.86	2,270,000
1972	155	25	20.0	500	.92	460,000
1973	155	35	21.0	735	1.46	1,073,000
1974	80	14	19.0	266	2.03	540,000
1975	50	8	21.0	168	2.16	363,000
1976	50	8	17.0	136	2.10	286,000
1977	60	10	18.0	180	1.55	279,000
1978	90	15	21.0	315	1.80	567,000
1979	85	18	28.0	504	1.90	958,000
1980	60	10	21.0	210	2.40	504,000

ALL HAY, 1909-1980

Year	Acres harvested (thousands)	Yield per acre, tons	Production, tons (thousands)	Price per ton	Farm value
1909	3,304	1.44	4,756	$6.50	$30,914,000
1910	3,235	1.16	3,743	7.40	27,698,000
1911	2,985	.71	2,113	11.00	23,243,000
1912	3,170	1.36	4,307	7.90	34,025,000
1913	2,705	.90	2,433	11.20	27,250,000
1914	2,855	1.28	3,642	8.30	30,229,000
1915	3,040	1.58	4,798	5.90	28,308,000
1916	2,930	1.39	4,084	7.70	31,447,000
1917	2,920	1.15	3,356	14.90	50,004,000
1918	2,990	.98	2,922	18.80	54,934,000
1919	2,945	1.47	4,340	15.40	66,836,000
1920	2,876	1.30	3,730	11.80	44,014,000
1921	2,667	1.27	3,378	6.90	23,308,000
1922	2,557	1.31	3,352	7.80	26,146,000
1923	2,525	1.40	3,530	8.80	31,064,000
1924	2,578	1.34	3,447	8.80	30,334,000
1925	2,467	1.23	3,041	8.60	26,153,000
1926	2,265	1.02	2,321	11.00	25,531,000
1927	2,388	1.67	3,996	8.00	31,968,000
1928	2,139	1.57	3,357	6.80	22,828,000
1929	1,961	1.38	2,698	7.70	20,775,000
1930	1,900	1.20	2,288	7.30	16,702,000
1931	1,983	1.16	2,309	5.10	11,776,000
1932	2,029	1.36	2,760	4.15	11,454,000
1933	1,880	1.10	2,062	5.40	11,135,000
1934	1,644	.69	1,135	11.70	13,280,000
1935	1,924	1.35	2,590	6.40	16,576,000
1936	1,698	.78	1,320	11.30	14,916,000
1937	1,409	.99	1,388	8.00	11,104,000
1938	1,305	1.37	1,782	4.75	8,464,000
1939	1,182	1.20	1,423	7.00	9,961,000
1940	1,358	1.35	1,829	6.60	12,071,000
1941	1,455	1.60	2,325	8.30	19,298,000
1942	1,659	1.77	2,944	9.40	27,674,000
1943	1,743	1.53	2,667	15.20	40,538,000
1944	1,784	1.67	2,982	14.30	42,643,000
1945	1,783	1.61	2,875	14.00	40,250,000
1946	1,746	1.35	2,354	18.70	44,020,000
1947	2,059	1.53	3,155	19.70	62,154,000
1948[1]	1,953	1.78	3,479	17.90	62,274,000
1949	2,057	1.59	3,269	15.50	50,670,000
1950	2,065	1.63	3,366	18.20	61,261,000
1951	2,189	1.62	3,548	23.70	84,088,000
1952	2,008	1.18	2,369	31.40	74,387,000
1953	2,297	1.18	2,719	25.60	69,606,000
1954	2,534	1.34	3,397	23.00	78,131,000
1955	2,548	1.35	3,449	20.30	70,015,000
1956	2,275	1.07	2,433	25.40	61,798,000
1957	2,389	1.80	4,310	15.40	66,374,000
1958	2,139	2.13	4,552	11.60	52,803,000
1959	1,913	1.85	3,534	16.30	57,604,000
1960	2,087	2.01	4,193	17.70	74,216,000
1961	2,134	2.01	4,297	17.20	73,908,000
1962	2,314	2.03	4,694	18.20	85,431,000
1963	2,279	1.65	3,755	22.60	84,863,000
1964	2,480	1.75	4,341	21.80	94,634,000
1965	2,587	2.13	5,523	18.20	100,519,000
1966	2,555	1.60	4,077	23.50	95,810,000
1967	2,465	2.14	5,282	20.50	108,281,000
1968	2,403	1.96	4,721	21.00	99,141,000
1969	2,387	2.14	5,113	21.00	107,373,000
1970	2,384	1.72	4,102	24.50	100,499,000
1971	2,477	2.12	5,255	24.00	126,120,000
1972	2,370	2.34	5,549	26.50	147,049,000
1973	2,450	2.37	5,796	38.50	223,146,000
1974	2,320	1.82	4,229	46.00	194,534,000
1975	2,280	2.14	4,890	48.00	234,720,000
1976	2,275	2.06	4,685	53.00	248,305,000
1977	2,290	2.38	5,445	43.00	234,135,000
1978	2,300	2.05	4,720	45.00	212,400,000
1979	2,300	2.54	5,840	48.50	283,240,000
1980	2,200	1.92	4,230	60.50	255,915,000

1. Baled basis beginning 1948, loose basis previous years.

ALFALFA HAY AND TAME HAY OTHER THAN ALFALFA, 1919-1980

Year	Alfalfa Hay			Tame Hay Other Than Alfalfa		
	Acres harvested (thousands)	Yield per acre, tons	Production, tons (thousands)	Acres harvested (thousands)	Yield per acre, tons	Production, tons (thousands)
1919	1,316	1.90	2,500	406	1.34	544
1920	1,303	1.60	2,085	436	1.43	622
1921	1,134	1.50	1,701	441	1.35	596
1922	1,021	1.65	1,685	510	1.30	662
1923	980	1.80	1,764	498	1.38	688
1924	981	1.80	1,766	594	1.19	708
1925	970	1.75	1,698	584	1.13	658
1926	931	1.50	1,396	458	.87	399
1927	968	2.30	2,226	456	1.34	613
1928	823	2.20	1,811	419	1.23	514
1929	730	1.85	1,350	312	1.23	383
1930	642	1.80	1,156	357	1.15	411
1931	719	1.55	1,114	345	1.20	414
1932	719	1.90	1,366	363	1.23	447
1933	705	1.60	1,128	398	1.02	406
1934	749	.86	644	273	.55	149
1935	854	1.75	1,494	292	1.09	318
1936	777	1.00	777	299	.67	201
1937	559	1.15	643	259	.94	243
1938	394	1.70	670	261	1.27	332
1939	380	1.60	608	217	1.06	230
1940	490	1.90	931	283	1.21	342
1941	642	2.15	1,380	240	1.31	315
1942	802	2.30	1,845	267	1.35	361
1943	810	1.95	1,580	260	1.20	313
1944	827	2.26	1,869	264	1.30	344
1945	852	2.10	1,789	293	1.20	352
1946	826	1.90	1,569	282	1.09	307
1947	1,016	1.95	1,981	341	1.18	402
1948	1,036	2.25	2,331	306	1.25	384
1949	1,026	2.00	2,052	389	1.23	479
1950	995	2.10	2,090	428	1.26	538
1951	985	2.15	2,118	511	1.24	633
1952	906	1.60	1,450	416	1.06	439
1953	1,114	1.55	1,727	531	95	503
1954	1,437	1.65	2,371	393	1.09	428
1955	1,538	1.60	2,461	390	1.10	430
1956	1,338	1.25	1,672	367	.83	305
1957	1,378	2.15	2,963	384	1.47	563
1958	1,295	2.55	3,302	305	1.62	495
1959	1,049	2.30	2,413	268	1.40	376
1960	1,080	2.60	2,808	316	1.54	487
1961	1,112	2.65	2,947	331	1.57	521
1962	1,201	2.75	3,303	387	1.44	556
1963	1,201	2.20	2,642	352	1.31	460
1964	1,261	2.30	2,900	413	1.34	554
1965	1,299	2.85	3,702	498	1.67	833
1966	1,273	2.05	2,610	547	1.41	769
1967	1,248	2.85	3,557	460	1.61	741
1968	1,148	2.60	2,985	506	1.58	800
1969	1,125	2.90	3,263	543	1.69	915
1970	1,125	2.30	2,588	518	1.42	736
1971	1,180	2.75	3,245	556	1.95	1,084
1972	1,170	3.05	3,569	550	2.30	1,265
1973	1,210	3.15	3,812	580	2.17	1,258
1974	1,070	2.55	2,729	420	1.60	670
1975	980	3.00	2,940	450	2.07	930
1976	1,000	2.90	2,900	425	1.80	765
1977	1,010	3.30	3,333	470	2.17	1,018
1978	1,000	2.90	2,900		Discontinued	
1979	1,000	3.50	3,500			
1980	1,000	2.85	2,850			

WILD HAY, 1909-1977

Year	Acres harvested (thousands)	Yield per acre, tons	Production, tons (thousands)	Year	Acres harvested (thousands)	Yield per acre, tons	Production, tons (thousands)
1909	1,608	1.08	1,737	1944	693	1.11	769
1910	1,585	.80	1,268	1945	638	1.15	734
1911	1,435	.50	718	1946	638	.75	478
1912	1,540	1.05	1,617	1947	702	1.10	772
1913	1,205	.65	783	1948	611	1.25	764
1914	1,205	.90	1,084	1949	642	1.15	738
1915	1,270	1.20	1,524	1950	642	1.15	738
1916	1,250	1.05	1,312	1951	693	1.15	797
1917	1,220	.80	976	1952	686	.70	480
1918	1,210	.65	786	1953	652	.75	489
1919	1,223	1.06	1,296	1954	704	.85	589
1920	1,137	.90	1,023	1955	620	.90	558
1921	1,092	.99	1,081	1956	570	.80	456
1922	1,026	.98	1,005	1957	627	1.25	784
1923	1,047	1.03	1,078	1958	539	1.40	755
1924	1,003	.97	973	1959	596	1.25	745
1925	913	.75	685	1960	691	1.30	898
1926	876	.60	526	1961	691	1.20	829
1927	964	1.20	1,157	1962	726	1.15	835
1928	897	1.15	1,032	1963	726	.90	653
1929	919	1.05	965	1964	806	1.10	887
1930	901	.80	721	1965	790	1.25	988
1931	919	.85	781	1966	735	.95	698
1932	947	1.00	947	1967	757	1.30	984
1933	777	.68	528	1968	749	1.25	936
1934	622	.55	342	1969	719	1.30	935
1935	778	1.00	778	1970	741	1.05	778
1936	622	.55	342	1971	741	1.25	926
1937	591	.85	502	1972	650	1.10	715
1938	650	1.20	780	1973	660	1.10	726
1939	585	1.00	585	1974	830	1.00	830
1940	585	.95	556	1975	850	1.20	1,020
1941	573	1.10	630	1976	850	1.20	1,020
1942	590	1.25	738	1977	810	1.35	1,094
1943	673	1.15	774		Discontinued After 1977 Crop Year		

ALL OTHER HAY[1], 1964-1980

Year	Acres harvested (thousands)	Yield per acre, tons	Production, tons (thousands)	Year	Acres harvested (thousands)	Yield per acre, tons	Production, tons (thousands)
1964	1,219	1.18	1,441	1973	1,240	1.60	1,984
1965	1,288	1.41	1,821	1974	1,250	1.20	1,500
1966	1,282	1.14	1,467	1975	1,300	1.50	1.950
1967	1,217	1.42	1,725	1976	1,275	1.40	1,785
1968	1,255	1.38	1,736	1977	1,280	1.65	2,112
1969	1,262	1.47	1,850	1978	1,300	1.40	1,820
1970	1,259	1.20	1,514	1979	1,300	1.80	2,340
1971	1,297	1.55	2,010	1980	1,200	1.15	1,380
1972	1,200	1.65	1,980				

[1] All types except alfalfa.

SEED CROPS, 1919-1980

Year	Alfalfa Seed				Sweet Clover Seed			
	Acres harvested	Yield per acre, pounds	Production, lbs. (thousands)	Farm value (thousands)	Acres harvested	Yield per acre, pounds	Production, lbs. (thousands)	Farm value (thousands)
1919	13,000	89	1,157	$301				
1920	45,000	94	4,230	673				
1921	28,000	84	2,352	282				
1922	30,000	73	2,190	304				
1923	15,000	57	855	135				
1924	69,000	94	6,486	1,044	26,000	155	4,030	$391
1925	67,000	89	5,963	900	43,000	150	6,450	458
1926	60,000	99	5,940	855	37,000	165	6,105	507
1927	13,000	78	1,014	150	49,000	150	7,350	419
1928	12,000	89	1,068	189	24,000	150	3,600	191
1929	47,000	94	4,418	764	22,000	140	3,080	163
1930	71,000	115	8,165	1,200	27,000	140	3,780	208
1931	61,000	94	5,734	528	21,000	135	2,835	111
1932	42,000	73	3,066	239	27,000	125	3,375	88
1933	78,000	120	9,360	758	19,000	140	2,660	94
1934	97,000	94	9,118	1,213	15,000	105	1,575	99
1935	73,000	94	6,862	817	13,000	125	1,625	61
1936	40,000	84	3,360	615	9,000	105	945	76
1937	43,000	89	3,827	880	10,000	155	1,550	113
1938	84,000	73	6,132	1,153	30,000	150	4,500	189
1939	113,000	70	7,900	1,422	37,000	145	5,400	247
1940	110,000	70	7,700	1,194	42,000	140	5,900	255
1941	123,000	59	7,300	1,350	42,000	140	5,900	280
1942	120,000	68	8,200	2,034	32,000	135	4,300	251
1943	166,000	84	13,900	4,559	37,000	140	5,200	477
1944	136,000	54	7,300	2,387	40,000	150	6,000	600
1945	178,000	65	11,600	3,770	37,000	145	5,400	540
1946	299,000	93	27,800	9,396	52,000	130	6,800	694
1947	218,000	84	18,300	4,081	64,000	150	9,600	979
1948	100,000	75	7,500	3,090	43,000	130	5,600	823
1949	121,000	80	9,700	4,093	64,000	115	7,400	1,095
1950	44,000	52	2,300	1,104	80,000	125	10,000	1,250
1951	48,000	60	2,900	1,696	30,000	94	2,800	291
1952	250,000	110	27,500	8,662	34,000	90	3,060	294
1953	130,000	95	12,350	2,779	29,000	120	3,480	306
1954	127,000	120	15,240	4,130	41,000	140	5,740	580
1955	180,000	125	22,500	4,118	24,000	160	3,840	330
1956	124,000	92	11,408	2,612	24,000	150	3,600	320
1957	30,000	80	2,400	571	13,000	160	2,080	158
1958	66,000	105	6,930	1,573	12,000	180	2,160	164
1959	85,000	75	6,375	1,396	12,000	130	1,560	117
1960	90,000	125	11,250	2,464	24,000	175	4,200	244
1961	67,000	70	4,690	1,238	11,000	140	1,540	143
1962	94,000	85	7,990	2,924	16,000	145	2,320	297
1963	105,000	95	9,975	2,893	25,000	130	3,250	328
1964	97,000	110	10,670	2,283	15,000	160	2,400	149
1965	88,000	110	9,680	2,197	11,000	160	1,760	107
1966	65,000	110	7,150	1,759	10,000	170	1,700	104
1967	25,000	85	2,125	635	5,000	160	800	41
1968	50,000	80	4,000	1,268	6,000	160	960	73
1969	60,000	85	5,100	1,612	7,000	140	980	83
1970	90,000	100	9,000	2,484	9,000	140	1,260	87
1971	60,000	95	5,700	1,431	7,000	170	1,190	72
1972	36,000	80	2,880	821	Sweet Clover Seed discontinued.			
1973	30,000	90	2,700	1,836				
1974	40,000	90	3,600	2,214	Tall Fescue Seed			
1975	43,000	95	4,090	2,004	45,000	250	11,250	1,688
1976	48,000	110	5,280	3,168	40,000	140	5,600	1,232
1977	42,000	95	3,990	3,192	30,000	150	4,500	990
1978	60,000	115	6,900	5,624	37,000	200	7,400	962
1979	40,000	95	3,800	3,078	24,000	225	5,400	972
1980	48,000	95	4,560	2,987	15,000	150	2,250	540

SEED CROPS, 1919-1980—*Concluded*

Year	Red Clover Seed				Lespedeza Seed			
	Acres harvested	Yield per acre, pounds	Production, lbs. (thousands)	Farm value (thousands)	Acres harvested	Yield per acre, pounds	Production, lbs. (thousands)	Farm value (thousands)
1919	12,000	49	588	$235				
1920	14,000	59	826	140				
1921	6,000	65	390	63				
1922	26,000	44	1,144	181				
1923	22,000	32	704	133				
1924	24,000	54	1,296	292				
1925	23,000	49	1,127	248				
1926	17,500	54	945	247				
1927	25,000	43	1,075	246				
1928	10,000	38	380	92				
1929	18,000	43	774	128				
1930	28,000	42	1,176	219				
1931	16,000	49	784	87				
1932	22,000	38	836	68				
1933	17,000	43	731	68				
1934	9,000	32	288	49				
1935	6,000	38	228	34				
1936	5,000	38	190	44				
1937	1,000	49	49	14				
1938	2,000	43	86	14	14,000	105	1,470	$57
1939	6,000	57	340	55	13,000	92	1,200	56
1940	7,000	41	290	33	30,000	190	5,700	205
1941	14,000	49	690	100	46,000	240	11,000	517
1942	15,000	64	960	166	46,000	190	8,700	435
1943	23,000	52	1,200	346	95,000	200	19,000	1,577
1944	34,000	62	2,100	634	171,000	265	45,300	2,038
1945	52,000	52	2,700	818	60,000	175	10,500	499
1946	65,000	49	3,200	1,046	51,000	200	10,200	510
1947	75,000	53	4,000	1,660	29,000	190	5,500	468
1948	57,000	49	2,800	1,226	76,000	270	20,500	1,168
1949	57,000	47	2,700	1,040	72,000	245	17,600	642
1950	72,000	42	3,000	849	40,000	225	9,000	405
1951	5,000	36	180	57	21,000	225	4,700	385
1952	62,000	46	2,852	890	15,000	175	2,625	399
1953	34,000	45	1,530	386	6,500	110	715	122
1954	7,500	45	338	144	18,000	190	3,420	564
1955	27,000	50	1,350	406	28,000	200	5,600	302
1956	20,000	63	1,260	410	9,000	150	1,350	116
1957	7,000	70	490	128	9,000	210	1,890	108
1958	26,000	63	1,638	485	14,000	240	3,360	175
1959	37,000	78	2,886	693	14,000	200	2,800	176
1960	40,000	90	3,600	734	10,000	200	2,000	164
1961	26,000	78	2,028	499	12,000	260	3,120	324
1962	30,000	76	2,280	670	10,000	210	2,100	235
1963	30,000	75	2,250	691	8,000	170	1,360	174
1964	20,000	75	1,500	330	15,000	240	3,600	371
1965	18,000	90	1,620	348	16,000	255	4,080	310
1966	11,000	75	825	196	14,000	215	3,010	298
1967	9,000	80	720	182	14,000	200	2,800	280
1968	10,000	70	700	194	14,000	210	2,940	359
1969	9,000	80	720	229	15,000	250	3,750	371
1970	10,000	85	850	247	16,000	220	3,520	282
1971	11,000	115	1,265	307	14,000	160	2,240	188
1972	7,000	90	630	197	9,000	190	1,710	258
1973	8,000	90	720	302	10,000	230	2,300	805
1974	9,000	85	765	[illegible]	7,000	225	1,575	490
1975	13,000	100	1,300	624	8,000	220	1,760	484
1976	14,000	85	1,190	559	8,000	205	1,640	558
1977	9,000	85	765	428	10,000	235	2,350	811
1978	12,000	85	1,020	[illegible]	9,000	235	2,115	624
1979	6,000	80	480	254	7,000	230	1,610	330
1980	7,000	85	595	[illegible]	6,000	150	900	315

FRUIT, 1916-1980

Year	Commercial Apples			Peaches			Grapes		
	Bearing acres	Production, million pounds	Farm value (thousands)	Bearing acres	Production, million pounds	Farm value (thousands)	Bearing acres	Production, tons	Farm value (thousands)
1916	....	....	....	....	3.2	$122	....	....	....
1917	....	....	....	....	3.2	165	....	....	....
1918	....	....	....	....	2.4	186	....	....	....
1919	....	54.4	....	11,300	10.3	578	2,300	2,700	....
1920	....	34.8	....	10,800	7.8	551	2,600	1,800	....
1921	....	4.4	....	10,300	.5	45	2,800	1,400	....
1922	....	71.3	....	9,900	35.9	1,010	3,000	3,300	....
1923	....	52.2	....	9,500	4.0	214	3,200	2,700	....
1924	....	52.2	....	9,000	9.6	410	3,400	3,000	$270
1925	....	39.2	....	8,600	13.7	572	3,600	2,500	212
1926	....	43.5	....	8,200	10.0	355	3,700	4,000	340
1927	....	58.6	....	7,800	9.4	343	3,800	4,200	315
1928	....	23.5	....	7,400	2.7	108	3,900	4,200	336
1929	....	37.6	$1,962	7,100	12.3	397	4,000	4,600	322
1930	....	17.2	996	7,500	1.3	49	4,000	3,500	262
1931	....	57.4	792	6,900	14.6	274	3,900	4,900	245
1932	....	15.2	1,624	6,900	2.2	55	3,800	4,900	196
1933	....	39.2	530	6,800	.7	23	3,600	4,200	189
1934	16,400	25.4	708	6,600	5.3	121	3,600	2,700	135
1935	16,400	49.2	1,018	5,800	10.1	252	3,400	4,000	180
1936	15,000	9.1	294	5,500	.8	28	3,000	1,000	60
1937	13,300	51.2	1,001	3,700	8.2	214	2,200	2,600	143
1938	12,800	23.3	509	3,100	1.4	38	2,000	2,200	121
1939	11,400	48.8	817	3,300	5.8	139	1,800	2,900	116
1940	11,100	58.6	1,238	3,100	6.7	154	1,700	3,100	130
1941	9,400	17.7	467	2,300	1.2	30	1,600	2,100	105
1942	6,900	27.5	950	1,100	1.1	43	1,600	2,900	160
1943	6,300	12.1	834	1,500	.1	8	1,600	1,700	162
1944	6,200	15.1	996	2,100	.7	49	1,600	2,100	210
1945	5,700	14.1	998	3,200	3.9	227	1,600	2,300	175
1946	5,400	22.4	1,465	4,200	7.4	370	1,300	1,400	129
1947	5,100	29.0	1,382	4,500	.6	34	1,100	1,400	123
1948	4,600	12.4	641	4,400	7.7	360	1,000	1,700	129
1949	4,100	23.2	836	4,500	8.9	324	1,000	1,600	128
1950	3,600	8.9	502	4,600	5.6	287	900	1,400	120
1951	3,500	18.8	834	4,400	6.2	312	800	1,300	112
1952	3,400	9.0	662	3,900	6.3	304	600	800	78
1953	3,000	7.6	522	3,000	3.8	200	500	600	60
1954	2,800	9.0	546	3,000	6.2	280	400	500	60
1955	2,600	10.0	518	1,900	5.2	265	300	500	60
1956	2,300	2.3	140	1,800	2.3	110	300	100	12
1957	2,200	12.6	500	1,600	7.4	333	300	600	60
1958	2,000	7.8	378	1,600	6.5	324	300	500	60
1959	1,900	10.0	446	1,500	4.8	259	300	400	60
1960	1,800	9.2	481	1,600	7.9	467	300	400	60
1961	1,700	10.5	492	1,800	6.5	367			
1962	1,700	9.1	459	2,000	4.6	306			
1963	1,600	9.1	450	2,000	2.4	171			
1964	1,600	14.3	687	2,100	8.4	475			
1965	1,600	13.0	508	2,000	7.2	407			
1966	1,700	8.3	322	2,000	1.0	79			
1967	1,700	7.5	452	2,000	3.6	324			
1968	1,700	17.0	911	1,900	6.2	527			
1969	1,800	17.6	815	1,900	9.5	703			
1970	1,800	13.0	536	2,000	8.0	608			
1971	1,700	15.5	986	2,000	6.0	528			
1972	1,800	12.4	658	1,800	1.7	153			
1973	1,800	15.0	1,110	2,000	10.0	1,120			
1974	1,800	14.3	1,372	2,000	2.5	325			
1975	1,900	17.0	1,444	2,000	11.0	1,485			
1976	1,900	11.4	901	2,000	4.0	660			
1977	1,800	16.0	1,408	1,200	9.0	1,350			
1978	1,800	10.0	1,110	1,100	5.0	880			
1979	1,800	15.0	1,340	1,100	5.0	1,250			
1980	1,800	11.0	989	1,100	6.5	1,300			

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Weights, Measures and Conversion Factors

Bushel weights:
- Wheat & soybeans=60 lbs.
- Corn, sorghum & rye=56 lbs.
- Barley (grain)=48 lbs.: malt=34 lbs.
- Oats=32 lbs.

Bushels to metric tons:
- Wheat & soybeans=bushels x .027216
- Barley=bushels x .021772
- Corn, sorghum, rye=bushels x .025400
- Oats=bushels x .014515

1 Metric ton equals:
- 2204.622 lbs.
- 22.046 hundredweight
- 10 quintals

1,000 kilograms equals:
- 36.7437 bushels wheat or soybeans*
- 39.3679 bushels corn, sorghum, or rye
- 45.9296 bushels barley
- 68.8944 bushels oats

Area:
- 1 Acre=.404694 hectares
- 1 Hectare=2.4710 acres

Yields:
- Wheat=bushels per acre x 0.6725=quintals per hectare
- Rye, corn=bushels per acre x 0.6277=quintals per hectare
- Barley=bushels per acre x 0.5380=quintals per hectare
- Oats=bushels per acre x 0.3587=quintals per hectare

* The 1980 Kansas wheat crop of 420.0 million bushels is equivalent to 11,430,531 metric tons.

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Kansas State Board of Agriculture
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